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# INFORMATION PLEASE ALMANAC 1955



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## FOREWORD



In this edition we present several new features: a word section with some exclusive material; a section devoted to recipes furnished by many world-famous restaurants, some of which have never before revealed the secrets of their art; a section giving tax help, with emphasis on the important provisions of the new law; reviews of the year by top writers in different fields; and many other additions.

It was possible to add these new features to our large volume of information because we increased the size of the book to 960 pages. We were pleased to be able to make these additions, which we think will broaden the Almanac's usefulness, without any sacrifice of basic reference material.

We had a lot of fun planning and developing the new material and we sincerely hope our readers will have the same experience in reading and using these sections.

It should be apparent to the reader that in choosing editors for our new sections, we have kept strictly to the rule that governs the preparation of the entire INFORMATION PLEASE ALMANAC: this is to select the outstanding authority in each field. After we select an authority to work on our plan for a new section, it is the practice of our editorial staff to consult with them on the material, the interpretation and the presentation. They are not always in agreement with our staff, but the final decision is always left to the authorities. After all, who are we to argue with Red Smith on sports, or Merriam-Webster on words, or Louis, the chef of Jack and Charlie's "21," on recipes.

You readers can argue with them if you want to and maybe you will. If you do not like "O Sole Mio" with an omelet or Webster's pronunciation of February, throw the bricks—we're strong. Or roses—we love them.

DAN GOLENPAUL, *Editor*



# TABLE OF CONTENTS

News Record of 1954 . . . . .	8	U. S. in World Affairs . . . . .	403
Reviews of the Year . . . . .	14	Soviet Russia . . . . .	406
News Stories of the Year . . . . .	22	The Rise of Hitler . . . . .	408
Congress of the U. S. . . . .	29	Conflicts Preliminary to WW II . . . . .	411
Word Section . . . . .	34	World War II . . . . .	413
New Words and Meanings . . . . .	33	Cold War . . . . .	416
Troublesome Pronunciations . . . . .	45	Korean War . . . . .	419
Words Frequently Confused . . . . .	56	World Peace Organizations . . . . .	421
Words Frequently Misspelled . . . . .	57	Atomic Energy . . . . .	423
Forms of Address . . . . .	60	Who's Who . . . . .	429
Recipes of World-Famous Restaurants . . . . .	64	Who Was Who . . . . .	457
Income Tax Help . . . . .	83	Science . . . . .	470
Crossword Puzzle Guide . . . . .	96	Religion . . . . .	482
Parliamentary Procedure . . . . .	125	Awards . . . . .	500
Bridge Systems . . . . .	133	Aviation . . . . .	515
Map Section . . . . .	135	Astronomy and Calendar . . . . .	522
States, Territories, Cities . . . . .	159	Nations of the World from Afghanistan to Yugoslavia . . . . .	547
Mileages Between Cities . . . . .	202	World Miscellaneous Information . . . . .	713
U. S. Geographical and Social Statistics . . . . .	208	Historical and News Events . . . . .	744
Education Statistics . . . . .	251	Firsts in America . . . . .	748
Colleges and Universities . . . . .	257	Societies and Foundations . . . . .	749
National Park System . . . . .	271	American Economy . . . . .	751
Museums of the U. S. . . . .	274	Where We Stand Today . . . . .	753
U. S. Presidential Elections . . . . .	279	Where We Started . . . . .	754
Principal Bills and Treaties . . . . .	294	The American Consumer . . . . .	754
U. S. Armed Forces . . . . .	303	Manufacturing . . . . .	756
U. S. Postal Regulations . . . . .	311	Our Natural Resources . . . . .	761
Biographies of the Presidents . . . . .	315	American Agriculture . . . . .	762
Government Departments and Agencies . . . . .	331	Construction . . . . .	763
U. S. Cabinet Members . . . . .	335	Transportation . . . . .	764
Ambassadors to and from the U. S. . . . .	341	Distribution . . . . .	765
Conferences and Treaties . . . . .	343	Foreign Trade . . . . .	767
Rise of the United States . . . . .	348	Boom and Depression . . . . .	768
Declaration of Independence . . . . .	355	Government Income and Spending . . . . .	771
Constitution of the U. S. . . . .	358	Banking and Finance . . . . .	772
Flag Information . . . . .	373	Economic Organizations . . . . .	774
The United Nations . . . . .	376	World Riches and Resources . . . . .	776
Headline History of Our Times . . . . .	395	Economic Statistics of the U. S. . . . .	780
A Quick Look Backward . . . . .	395	Sports History, Records, etc. . . . .	806
Depression and Recovery . . . . .	400	1954 Champions and Records . . . . .	893
		INDEX . . . . .	918



# NEWS RECORD OF 1954



(Separate articles beginning on Page 22 give more specific information about these items: Eisenhower Record, Indo-China War, McCarthy Story, Western European Union, Hurricanes, U.N. General Assembly, Trieste, 1954 Elections.)

## JANUARY 1954

FAMOUS MEN got into trouble and famous women got into love. Papa Ernest Hemingway had two plane crack-ups in Africa, and became one of the few persons in history to read his own obituary notices (since the newspapers for a time thought him lost). . . . Arthur Godfrey was accused of buzzing the control tower of an airport in a momentary fit of pique while piloting his own plane; he was grounded in punishment. . . . Marilyn Monroe, of architectural fame, was married to Joe DiMaggio, of baseball fame; they went to Japan and Korea on their honeymoon, and there were riots by GIs when one of them appeared on the stage. . . . In a New York hotel suite, Barbara Hutton, a woman of means, began her fifth honeymoon; the bridegroom was Porfirio Rubirosa, a diplomat by courtesy of the Dominican Republic, whom the tabloids called "The Big Dame Hunter." (See March) . . . Us ordinary people got excited about the soaring price of coffee—over a dollar a pound and still heading skyward. Restaurants boosted the price to 15 cents a cup, and some urged their customers to drink tea instead. . . . Broadway lost an old friend—*South Pacific* closed after a 5-year run during which 3½ million persons had seen it. . . . Sad mystery of the month was why those 21 American soldiers in Korea chose to exile themselves behind the Iron Curtain instead of returning home.

- 1 Robert F. Wagner, Jr., becomes Mayor of New York.
- 4 Eisenhower pledges "every legitimate means" will be used to avert a depression.
- 6 2nd session of 83rd Congress convenes.
- 10 British jet Comet airliner crashes off Italy, killing 35; Britain grounds Comets pending technical examination.
- 12 Dulles says new U. S. defense policy is based on instant massive retaliation.
- 19 General Motors announces \$1 billion expansion program.
- 20-21 India turns over to Allies over 21,000 Chinese and North Korean prisoners who spurn communism; they are released Jan. 23.
- 21 Eisenhower calls for \$65.6 billion budget, cutting spending by \$5.3 billion.

- 21 1st atomic-powered submarine, *Nautilus*, launched at Groton, Conn.
- 22 Russian veto in U. N. Security Council kills plan for settling Syrian-Israeli dispute.
- 23 Tariff cuts urged by Eisenhower's Foreign Economic Policy Commission.
- 23-24 Mr. and Mrs. Ernest Hemingway survive 2 plane crashes in Africa.
- 25 Sen. McCarthy agrees to change committee rules; 3 Democrats resume membership Jan. 26.
- 26 Senate ratifies (81-6) mutual security treaty with Republic of Korea.
- 28 21 pro-Red American soldiers in Korea go into custody of Communists.

**DIED:** 19—Sydney Greenstreet, 74.

## FEBRUARY 1954

AS THOUGH we didn't have enough worries already, stories kept popping into the papers suggesting a connection between lung cancer and cigarette smoking. A magazine pole of advertising executives indicated that 23% of them had quit smoking. Scared tobacco companies rushed into the market with new brands of filter-tip cigarettes, and people switched to them in droves—not knowing, of course, whether the filters filtered out the right thing. . . . For those who chose a different line of worrying, there was the slacking off of business, the rising unemployment. Were we going to fall on our economic face? Nope, said Eisenhower; Uncle Sam will step in if necessary. . . . Out in Los Angeles, Jimmy Roosevelt was busy apologizing to 9 women whom he had named as playmates in a letter to his wife, and darned if she didn't make it public when she sued him. "Twasn't true, Jimmy moaned. . . . The beauties of television were appreciated by a frozen-food company which put out a "TV Dinner"—turkey, sweet potatoes and peas already cooked on a little compartmented tray; warm it up, take it into the living room and wolf it off your lap while staring at the set.

- 3 Over 300 Hindus killed in stampede near Allahabad, India, to bathe in holy river water.
- 6 U. S. sends additional bomber planes



- and Air Force technicians to help French in Indo-China.
- 7 Maxwell Bodenheim, poet and novelist, and wife found slain in New York; slayer confesses Feb. 10.
- 10 Molotov offers Europe 50-year security treaty; U. S. would be excluded.
- 10 Robert R. Young defeated in bid to take command of New York Central Railroad; proxy battle begins.
- 15 Two French naval officers descend 13,284 feet below surface of Atlantic for depth record.
- 16 Government now estimates January unemployment at 3,087,000 (previous estimate: 2,359,000).
- 17 Eisenhower urges we ease atom secrecy to aid allies and industry.
- 18 Big 4 Foreign Ministers conference in Berlin ends; only agreement is for Far East parley in Geneva, Apr. 26.
- 18 Sen. McCarthy grills Gen. Ralph W. Zwicker, war hero; calls him "not fit to wear that uniform."
- 20 Army Secretary Stevens defies Sen. McCarthy by ordering officers to ignore his subpoenas.
- 24 Army Secretary Stevens yields to Sen. McCarthy, promising officers will testify.
- 24 James Roosevelt ordered to pay wife \$1,625 a month temporary support.
- 25 Senate defeats Bricker Constitutional amendment to restrict President's treaty-making power.
- DIED:** 13—Frederick Lewis Allen, 63; 26—Dean William R. Inge, 93.

### MARCH 1954

**T**HE MIGHTIEST explosion known to man rocked the islands of the far Pacific and sent a chill into hearts all over the world. American scientists who set off the great H-bomb were awed when the blast turned out to be far more powerful than they had predicted. Radioactive ash rained on a Japanese fishing boat 80 miles away; 23 men of the crew were hospitalized for burns. The Atomic Energy Commission gave us the grim news that the H-bomb now could wipe out a city—any city—and showed us color movies of the first one we set off in 1952. . . . Quite erroneously, some people took to blaming the H-bomb for a mysterious epidemic that hit automobile windshields. City after city in the United States and Canada reported that the windshields were suddenly pock-marked, as though hit by invisible, miniature flying saucers. Probable explanation: normal erosion, plus publicity, plus mass psychology. . . . No myth was that check Howard Hughes wrote in Hollywood for \$23,489,478.

It didn't bounce (his personal fortune has been estimated at \$500 million) and it made him the first individual ever to be sole owner of a major motion picture producing company—RKO Pictures. . . . Barbara Hutton's fifth marriage had lasted 73 days when she announced separation from Porfirio Rubirosa.

- 15 Congressmen wounded as 3 Puerto Rican nationalists fire from House tourist gallery.
- 3 Eisenhower rebukes Sen. McCarthy for "disregard for standards of fair play."
- 11 Army report accuses Sen. McCarthy of using pressure on behalf of ex-aid, Pvt. G. David Schine.
- 12 Sen. McCarthy accuses Army of trying to blackmail him.
- 13 Inter-American conference at Caracas adopts U. S. resolution against international Communist intervention.
- 16 23 Japanese fishermen were burned 80 mi. away from bigger-than-expected U. S. hydrogen blast in Marshall Is. on Mar. 1.
- 23 Senate rejects Republican effort to oust Sen. Dennis Chavez, Dem., New Mex., because of alleged voting irregularities.
- 26 East Germany is granted "sovereignty" by Russia, but Russian troops will continue occupation.
- 26 2nd hydrogen explosion set off in current Marshall Is. test series.
- 29 Dulles warns U. S. military action possible to keep Reds from conquering Southeast Asia.
- 29 Israeli raid on Jordan village of Nahhalin; 9 Arabs killed.
- DIED:** 7—William (Bill) H. Hays, 74; 26—Lou Silvers, 64.

### APRIL 1954

**P**EOPLE BEGAN yelling "Point of order!" at each other. They weren't really crazy—just groggy from listening to too much Sen. McCarthy on radio and TV. The cast of characters on this extraordinary morning-and-afternoon show also included a rubber-faced Tennessee homicide lawyer (Jenkins), a youth who looked as though he were perpetually pouting (Cohn), a sober-sided Secretary of the Army (Stevens) who appeared somewhat bewildered by it all, and his special counsel (Welch) who looked like a character out of Dickens and who solemnly informed McCarthy, in response to a question, that a pixie is a close relative to a fairy. . . . But there was a far more ominous cloud on the horizon. Would the United States plunge into another war in Asia? We came within



a hair of sending our warplanes into action to fight Communist rebels in Indo-China, but were held back by a "No" from Prime Minister Churchill. . . . On the home front, there were a couple of firsts. The first RCA color TV sets rolled off the production line, to sell for a mere thousand bucks. Also rolling were the first traveling stockbroker's offices—busses sent out by Merrill Lynch, Pierce, Fenner & Beane to roam New York's suburbs and lure people in to listen to their radio telephones bringing the latest stock market quotations.

- 2 New York's longest dock strike (29 days) called off by International Longshoremen's Association.
  - 4 Arturo Toscanini announces retirement as conductor of NBC Symphony Orchestra.
  - 8 Armed Forces to bar Reds and oust all security risks.
  - 8 British jet Comet airliner blows up over Mediterranean, killing all 21 aboard; Comets again grounded.
  - 12 Dr. J. Robert Oppenheimer, father of the atomic bomb, has been suspended by AEC as possible security risk.
  - 12 FHA scandal disclosed; its commissioner resigns.
  - 13 Britain and U. S. agree to examine possibility of a NATO-type security organization for Pacific.
  - 16 Vice President Nixon advocates sending U. S. troops to defend Indo-China if French withdraw.
  - 16 Patrick B. McGinnis, broker, wins control of New York, New Haven and Hartford Railroad from Frederic C. Dumaine.
  - 21 U. S. Air Force planes fly French troops from Paris to Indo-China to reinforce Dienbienphu.
  - 22 Army vs. McCarthy inquiry opens.
  - 26 19-nation conference on Korea and Indo-China peace opens in Geneva.
- DIED:** 2—William (Pudge) Heffelfinger, 86; 2—Gen. Hoyt Vandenburg, 55; 8—Fritz Scheff, 74.

### MAY 1954

**W**EIRD by-product of the atomic age: Some of the dumbest gambling in America's wild gambling history was sweeping the country. Millions of shares of uranium stock—wildcat ventures—were being snapped up at prices ranging from one cent to a couple of dollars. So intense was the fever that housewives shot the entire family savings in unknown companies that *just might* strike uranium. . . . Another weird phenomenon that flourished

was the "bootlegging" of new automobiles. Panicky dealers, overstocked, would defy the rules of the manufacturers and sell off surplus new cars at the wholesale price in order to get back their cash, thus bringing anguish to the hearts of the dealers who stuck by the rules. . . . On firm financial ground was Charles A. Lindbergh. The movies paid him what was said to be the highest price Hollywood ever paid for a book—in the neighborhood of a million dollars—for his best-selling autobiography, *The Spirit of St. Louis*. . . . The good old term "home run" was disappearing from baseball; television announcers called it a "Ballantine blast" or a "White Owl wallop" . . . And a future televiewer was being born every minute; we were in the midst of a birth-rate boom. The nation's under-18 population was up to 53.6 million as compared to 40.3 million in 1940.

- 4 Cpl. Edward S. Dickenson sentenced to 10 years hard labor by Army for informing on fellow prisoners in Korea.
- 6 Roger Bannister runs mile in 3 min. 59.4 sec. at Oxford, England.
- 7 Congress passes bill to build St. Lawrence Seaway.
- 7 Dulles says free world may have to fight to stop Reds in Asia.
- 7 Senate kills bill to revise Taft-Hartley Law.
- 7 Dienbienphu falls to Indo-China Red rebels.
- 8 French ask quick truce in Indo-China, outlining terms at Geneva conference.
- 10 Intl. Longshoremen's Assn. and 8 locals fined \$92,500 for contempt in failing to end waterfront strike.
- 13 Successful completion of 1954 hydrogen explosion tests in Pacific announced by AEC.
- 15 Queen Elizabeth II and Duke of Edinburgh return to London after 6-month world tour.
- 17 Supreme Court unanimously bans racial segregation in public schools.
- 17 U. S. State Dept. says Guatemala got shiplod of arms May 15 from Red Poland.
- 19 Pakistan signs 1-year defense pact with U. S.; will get arms.
- 21 Senate kills Eisenhower-proposed amendment to lower voting age to 18.
- 26 Egyptian archaeologist discovers funeral boat of Cheops near Great Pyramid of Giza.
- 26 New York Central railroad stockholders vote; result (June 14) ousts management, puts in Robert R. Young.
- 27 Explosions and fire aboard aircraft carrier *Bennington* off Rhode Island kill more than 100.



- 28 White House calls McCarthy usurper of Executive power in seeking secret information from Federal employees.
- 29 FBI arrests 7 top Connecticut Communist-party leaders.
- DIED: 29—Anne O'Hare McCormick, 72.

## JUNE 1954

NOW HOUSEWIVES could get back to work, for the televised Army-McCarthy hearings were over—after 36 days and 2 million words. Among other things, the TV audience heard that McCarthy followed a maxim taught him by "an Indian named Charlie" with whom he once worked on a farm. If another person approaches you in a not completely friendly fashion—advised Indian Charlie—start kicking that person as fast as possible below the belt. . . . A famous Britisher named Charlie (last name Chaplin, age 65) received good news at his self-exile home in Switzerland; his devotion to the Communist party line won him a Stalin peace prize, value about \$14,000. . . . In New York, a man named Bob (last name Young, age 57) won the greatest railroad battle of the century. Backed by two Texas oil millionaires, he seized control of the New York Central, the world's second biggest railroad. . . . Latest trend in industry: diversification. For example, the Stanley Warner Corp., operator of a big movie chain, began manufacturing girdles, baby pants and foam pillows. . . . A confession came from Proctor & Gamble, makers of Ivory Soap ("It Floats"). In the 75 years of this soap's existence, there have been seven scandalous and mysterious instances in which a bar sank to the bottom and stayed there.

- 1 Special AEC panel recommends Dr. J. Robert Oppenheimer be dropped as atomic consultant and denied secrets, though he is called "loyal and discreet."
- 5 Greece, Yugoslavia and Turkey announce new Balkan military alliance.
- 8 Dulles announces U. S. will not intervene alone in Indo-China.
- 12 Premier Joseph Laniel resigns. His successor (June 18) is Pierre Mendès-France.
- 14 Revealed that late Harold G. Hoffman, former Governor of New Jersey, left letter confessing he embezzled \$300,000.
- 15 Allies end negotiations for Korea peace at Geneva conference, blaming Communist intransigence.
- 17 Army-McCarthy inquiry ends.
- 18 Anti-Communist exiles invade Guatemala to overthrow Red-infiltrated government.
- 21 American Cancer Society reports "heavy"

cigarette smokers aged 50 to 70 have death rate up to 75% higher than non-smokers.

- 22 Don Hollenbeck, 49, radio news commentator, kills himself.
- 28 Eisenhower-Churchill communique calls for Southeast Asian defense treaty like NATO.
- 29 Quentin Reynolds awarded \$175,001 in libel suit against Westbrook Pegler.
- 29 AEC votes 4-1 that Dr. J. Robert Oppenheimer is security risk.
- 29 Steel industry grants package wage rise equivalent to 12 cents.
- DIED: 6—Gabriel Pascal, 60; 19—Sen. Lester C. Hunt (Dem., Wyo.), 61.

## JULY 1954

FOR TWENTY-TWO years—up until this month—the world had never been without a shooting war on some spot of the globe. (Remember the little wars that ushered in the big one—Japan vs. China, Italy vs. Ethiopia, the Spanish Civil War?) Now, at last, no man was officially assigned to kill a fellow man. A truce was reached in Indo-China after nearly eight dreary years of jungle-and-swamp warfare. But the cost of peace was ominous: France turned over 14 million people of northern Viet-Nam to Communist rule. . . . Here at home, a mean old professor at the University of Chicago complained in solemn print that the words of most of our popular songs are unspeakably bad. Fiddlesticks! Hadn't he heard the new song that went: "If a Hottentot taught a tot to talk ere the tot could totter . . ."? And didn't the professor know that "I Saw Mommy Kissing Santa Claus" has now sold some 2 million copies? . . . At the movies, either we were getting nostalgic, or else a new generation was coming along, or both. That 17-year-old veteran, *Gone With the Wind*, was revived in its original three-hour version, and it went almost to the top of the money-maker list. (Top was *The Caine Mutiny*.) . . . As for parlor games, maybe we were a wee bit whacky. The Bingo boom took on such proportions that it became a political issue in New Jersey, and in Los Angeles a dog-food manufacturer put it on TV under the name of Marco.

- 1 French abandon 1,000 sq. mi. of Indo-China Red River delta area to Communists.
- 2 Guatemala revolt ends; Communists ousted from government and outlawed.
- 4 British meat rationing ends—last of wartime controls.



- 5 Russia has demanded recall of 2 U. S. diplomats in Moscow, apparently retaliating for our expulsion of 3 Soviet diplomats caught spying in U. S.
- 7 Eisenhower indicates he opposes Sen. Knowland's move to take U. S. out of U. N. if it admits Red China.
- 8 Col. Castillo Armas, who led Guatemala revolution, is head of ruling junta.
- 12 Eisenhower asks \$50-billion highway program.
- 13 House kills health reinsurance plan.
- 20 Roy M. Cohn resigns as chief counsel to Senate Permanent Investigations Subcommittee.
- 21 Indo-China truce signed at Geneva conference; Reds get half of Viet-Nam.
- 22 Dr. Otto John, head of West German political secret service, defects to East Germany.
- 23 2 Red Chinese planes shoot down British airliner in South China Sea.
- 26 U. S. carrier-based planes shoot down 2 attacking Red Chinese planes off Hainan Island, where British airliner was downed July 23.
- 26 Pres. Rhee of Korea confers with Eisenhower in Washington; addresses joint session of Congress July 28; urges war on Red China.
- 27 Britain agrees to abandon Suez Canal Zone; promises Egypt to withdraw all troops in 20 months.
- 27 13-day filibuster in Senate ends; atomic-energy bill passed 57-28.
- 31 France proclaims internal autonomy for Tunisia; riots follow in Morocco.

### AUGUST 1954

NOT CONTENT with all the gold pouring in from his magazines *Time*, *Life* and *Fortune*, Mr. Henry Luce put out a new one called *Sports Illustrated*. The heading on the advertisements for it was: "The Golden Age." Well, maybe it was. . . . At Reno, Barbara Sears Rockefeller, known as "Bobo," got a divorce from Winthrop Rockefeller. Her record settlement was \$2 million in cash and \$3.5 million in trust funds and allowances for herself and son Winnie, 5. The total fell short of the sum the United States paid Russia for Alaska. . . . At the White House, President Eisenhower felt confident enough to announce flatly: "The paramount fact about the economy at midyear is that the recent decline in economic activity has come to a halt." (He was in a good mood, too, about how well the 83rd Congress had behaved; according to his figures, it had passed 54 out of 64 measures in his Republican program.) . . . The Rev. Dr. Norman Vincent

Peale, minister of the Marble Collegiate Church in New York City, must have felt that the age was fairly golden; his book, *The Power of Positive Thinking*, topped the nonfiction best-seller list on which it had happily roosted for 94 weeks. . . . And in a nonmercenary sense, a golden age had dawned in man's eternal footrace against time. Never before had man run a mile in less than four minutes. But now two men were doing it—Bannister of England and Landy of Australia.

- 4 Eisenhower outlines "good partner" philosophy for U. S. foreign relations.
- 5 3-year Anglo-Iranian oil dispute settled; Iran will pay \$85 million for nationalizing British properties.
- 6 Emilie Dionne, 20, one of the quintuplets, dies after epileptic seizures.
- 10 Congress approves flexible farm-price supports.
- 10 Construction of St. Lawrence River power project inaugurated.
- 10 Studebaker workers vote to take wage cut rather than risk end of ailing auto company.
- 17 Herbert Hoover, Jr., named Under Secretary of State.
- 19 Congress passes bill outlawing Communist party.
- 20 Congress adjourns.
- 22 6-nation Brussels conference on revising European Defense Community ends in disagreement.
- 24 Pres. Getulio Vargas of Brazil kills himself after Army overthrows him.
- 27 Chinese Communists reveal they raided Nationalist island of Quemoy in Formosa Strait on Aug. 23.
- 30 French National Assembly kills European Defense Community treaty, 319-264.
- 31 Subcommittee reports on Army-McCarthy inquiry blame both sides.
- 31 Hurricane Carol rakes Long Island and New England; more than 50 dead.

### SEPTEMBER 1954

'T WAS A GLOOMY month for the men. That old spoil-view, Christian Dior of Paris, was flattening down the female architecture at its most outstanding points. He tagged his new gowns the "H-line." Scoffed Jane Russell: "If a woman's got it, you can't do anything to suppress it." Retorted a Dior man: "She presents no problems we can't handle." Those in favor of the H-line argued that Dior was doing a favor to the vast majority of women by cutting down the advantages enjoyed by such persons as Jane Russell, Marilyn Monroe and Gina Lollobrigida. . . . Six of his

colleagues solemnly ruled that Sen. McCarthy's conduct was unbecoming to a Senator, and that he should be censured. . . . The H-bomb claimed its first victim—a Japanese fisherman who died in Tokyo as the result of radioactive fall-out from the American test explosion in the Pacific six months previously. . . . Our own farsighted Railway Express Agency burrowed into Iron Mountain, near Hudson, N. Y., and hollowed out a huge ventilated cave containing concrete vaults. For a rental of \$10 the first year, \$5 thereafter, you could seal up your precious documents, safe from either A-bombs or H-bombs. Couldn't seal yourself up, though.

- 4 Dulles pledges U. S. will automatically defend Philippines in case of attack.
- 4 Russian planes shoot down U. S. Navy patrol bomber off Siberia.
- 6 Eisenhower launches world atomic pool without Russia.
- 7 Gov. Dewey won't run for 4th term.
- 8 8-nation Southeast Asia defense treaty signed at Manila.
- 11 Hurricane Edna does much damage at Cape Cod.
- 13 Maine elects Democratic Governor, 1st in 20 years.
- 13 Senate Watkins committee ends public hearings on whether to censure Sen. McCarthy.
- 17 Russia announces new atomic weapon explosions.
- 19 U. S. charges Red China with "warlike" acts and piracy on high seas.
- 21 U. N. postpones for this year decision on admitting Red China.
- 22 Lt. Col. Harry Fleming found guilty by court martial of collaborating with Reds while prisoner in Korea; sentenced to dismissal.
- 26 Typhoon tips over Japanese ferry, killing 1,172.
- 27 Senate select committee recommends censuring Senator McCarthy on 2 counts.
- 29 Britain offers to keep troops indefinitely on Continent if Western Europe devises unified security system.
- 30 U. S. bars steel merger of Bethlehem and Youngstown as an antitrust violation.

**DIED:** 3—Eugene Pallette, 65; 7—Bud Fisher, 69; 7—Pop Warner, 83; 28—Sen. Pat McCarran, 78; 28—Bert Lytell, 69.

## OCTOBER 1954

**C**ONSTERNATION had filled the free nations of the West in the last days of August when France killed the European Defense Community—the project, two years in the making, for uniting the democracies

against the menace in the East. Now, before our happily astonished eyes, a miracle took place. In the incredibly short time of 7 weeks, a new structure for Europe was built—the Western European Union. Germany, the bitter foe of 9 years ago, was invited into NATO as our new ally and urged to rearm. . . . At home, the voices of politicians filled the air, and their faces scowled at us on TV. The issue in this Congressional-election year was simple: Coattails. Could Republicans (even some who didn't love him) ride into the Senate and the House on the popularity of Ike? . . . Marilyn Monroe's skirt was sent flying high for the edification of photographers by a wind machine underneath a subway grating on a New York City sidewalk. Not many days later, the 9-month-old "romance of the century" busted up; she and Joe DiMaggio fanned out. . . . On the subject of romance, Liberace had this to say: He knew a girl he'd like to marry if she'd wait a year. . . . Great things were stirring in the doll industry. A New York firm manufactured a doll that could kneel as though praying. A jealous New Jersey firm created a doll that could acquire a sun-tan. But good old Gimbels claimed the championship with a double-action doll that could not only wet, but also blow its nose.

- 3 9 nations sign Protocol of London as substitute for EDC.
- 4 Marilyn Monroe to get divorce from Joe DiMaggio.
- 5 Italy and Yugoslavia agree to divide Trieste.
- 7 Owen Lattimore indicted again as perjurer on Communist sympathies.
- 9 Joseph S. Petersen, Jr., employee of Natl. Security Agency, accused of mis-handling classified documents.
- 11 Secy. of Defense Wilson says he likes bird dogs better than kennel-fed dogs; remark causes political furor throughout nation.
- 11 Russians give Port Arthur to Communist China.
- 16 Hurricane Hazel hits 8 states in Eastern U. S.
- 16 Rep. Douglas R. Stringfellow, Utah Republican, admits his story of war heroism was hoax; quits race Oct. 18.
- 17 Clifford P. Case, N. J. Senatorial candidate, calls attack on sister's loyalty false and "dirty."
- 18 Trial of Dr. Samuel H. Sheppard, charged with bludgeoning wife to death, begins in Cleveland.
- 19 Sen. Irving M. Ives, N. Y., links gubernatorial opponent Averell Harriman to 1930 scandal.



- 20 Anthony Eden made Knight of Garter.
- 21 3 Americans share Nobel Prize for medicine and physiology for fight against polio: Dr. John F. Enders, Harvard; Dr. Thomas Weller, Harvard; Dr. Frederick Robbins, Western Reserve.
- 23 Protocols signed in Paris giving West Germany sovereignty and admitting it to NATO and Western European Union. France and Germany settle their Saar quarrel.
- 25 First televised Cabinet meeting; Dulles reports on new Western European Union.
- 26 Queen Mother Elizabeth of England reaches U. S. for 3-week visit.
- 26 U. S. Atomic Energy Commission confirms a new series of Russian nuclear tests.

28 Ernest Hemingway wins 1954 Nobel prize for literature.  
**DIED:** 9—Justice Robert Jackson, 62; 22—George McManus, 70

### NOVEMBER 1954

- 1 Gen. Fulgencio Batista elected President of Cuba after his only opponent withdraws, charging irregularities.
  - 2 Democrats win control of House of Representatives and possible control of Senate in mid-term elections. (See Page 27 for election story.)
  - 3 Dr. Linus Pauling, of California Institute of Technology, wins 1954 Nobel chemistry prize. Dr. Max Born and Dr. Walther Bothe, both of Germany, win prize for physics.
- DIED:** 3—Henri Matisse, 84.

## REVIEWS OF THE YEAR



### SPORTS

by RED SMITH

Sports Columnist, N.Y. Herald Tribune

**I**N 1954 a novel was published under the terse title, *The Year the Yankees Lost the Pennant*. In 1954 the Yankees lost it.

In the fictional account, a Washington fan sold his soul to the devil in order to accomplish New York's overthrow. In real life, the Yankees sold their pitcher, Vic Raschi, to Gussie Busch, a cherubic St. Louis brewer. Raschi had won 13 games toward New York's fifth successive championship in 1953. With Raschi pitching for the Cardinals, the Yankees lost the 1954 race to Cleveland by 8 games.

The 4-minute mile, unattainable goal of footracers since man learned to tell time, became a commonplace in 1954. But then, it was a year of haste all over, with owners of baseball teams in a frantic race to fire their managers and move their clubs out of town.

At the close of the 1953 season, the impoverished St. Louis Browns had jumped to Baltimore and become Orioles in the hope of duplicating the astonishing financial success enjoyed by the Boston Braves after shifting to Milwaukee in the spring. That was the start; here's what followed:

The Cincinnati Reds fired their manager, Rogers Hornsby, and hired Birdie Tebbetts. After leading the Dodgers to two consecutive pennants, Charley Dressen was eased out of Brooklyn because of his wife's inability to spell the term, "one year." He was replaced by Walter Alston, a schoolmaster from the minor leagues.

Jimmy Dykes was sacked by the Philadelphia Athletics, who promoted Eddie Joost to the vacancy. Baltimore dropped Marty Marion and picked up Dykes. The Chicago Cubs bounced Phil Cavarretta in favor of Stan Hack. The Philadelphia Phillies nudged Steve O'Neill aside and employed Terry Moore.

Paul Richards quit the Chicago White Sox to take Dykes' job in Baltimore and Marion inherited Richards' portfolio. The Washington Senators canned Bucky Harris and brought Dressen back. The Boston Red Sox streeted Lou Boudreau and called in Pinkey Higgins. The Detroit Tigers waved farewell to Freddy Hutchinson and welcomed Harris. The Phillies got rid of Moore and went to the bushes for Mayo Smith.

Joost waited to learn where the Athletics' franchise would go and whether he would accompany it. The merry-go-round whirled on.

The year began on a cultural note, with undergraduates furthering their education in football "bowl" games promoted to stimulate tourist business in Southern California, Florida, Louisiana, Texas and way-points. For the next two months, basketball players gangled across varnished floors, without a single betting scandal, and televised fist fighters punched each other's faces 4 or 5 nights a week for the benefit of the razor-blade and beer trade.

Then it was March, and the baseball teams were in training camps, and the sports year was really under way. In his first day in uniform, Ted Williams, the lean and hungry batsman of the Boston Red Sox, fell down and broke his collar bone. In his first exhibition game, Milwaukee's Bobby Thomson slid and broke an ankle.

Thomson, whose memorable home run against Brooklyn had won the 1951 pennant for the New York Giants, was to have performed a similar service for Milwaukee. Playing without him until August, the Braves finished third.

Williams got into the Boston batting order in May with a metal pin holding his shoulder together. In a double-header in Detroit he went to bat 9 times, made 8 hits including two home runs. "It hurt like hell," he said.

"When they take that pin out," said the Yankees' Casey Stengel, "I want it. Wanta stick it into a couple of my guys."

Though their pitching was a trifle thin and some of their key players were growing old, the Yankees won 103 games, 4 more than their best in 5 championship years under Stengel. Inasmuch as Cleveland won 111, this entitled them to go bird shooting the day after the season closed without tarrying for the World Series.

For that matter, the Indians didn't tarry long. They were widely favored to win the World Series from the New York Giants, even though the Giants had an implausible outfielder named Willie Mays who had won the National League batting championship in his first full season in the big league, and a remarkable young pitcher named Johnny Antonelli, obtained from Milwaukee in the trade for Bobby Thomson. Except for these two, the Giants were essentially the same team that had finished fifth in 1953; they were considered a lucky club.

They stayed lucky. A pinch-batter named Dusty Rhodes won the first World Series game for New York with a pop fly home

run in the tenth inning. Rhodes tied the second game with a single and made victory secure with another home run. He won the third with a 2-run single.

The Giants completed Cleveland's destruction in the fourth game without even calling upon Rhodes. They were saving him in case they should need somebody to walk on water.

Two fights for the heavyweight championship of the world topped the year's operations in boxing. The same men engaged in both, with widely dissimilar effect.

In June Ezzard Charles, bull fiddle virtuoso, former champion and perennial challenger, faced up to Rocky Marciano for 15 rounds, scarcely finching from the champion's terrible fists. Though he lost the decision by an indisputable margin, Charles won wild applause for stoicism when he walked unaided from the ring, his face a gibbous bubble of pain.

In September, Charles was clubbed to the floor 3 times inside of 8 rounds. After the third fall he got up at the count of 10, a fraction of a second too late. Or, as some ringsiders reasoned, just late enough to avoid unnecessary additional punishment.

This time it was Marciano's face that looked like a detour on Highway 66. His nose was split lengthwise. Blood from a cut near his left eye impaired his vision. He needed only one eye, though, to survey the heavyweight picture, barren of qualified contenders.

In the divisions below the heavyweights, it was a relatively quiet year. Kid Gavilan, the welterweight champion, tried for Bobo Olson's middleweight title and missed by considerable. Before the bout Gavilan and his brain trust denied reports that he had an injured hand; afterwards they allowed that the hand might have been injured, after all.

Scheduled to defend his title against Philadelphia's Johnny Saxton, in September, Gavilan backed out for an unusual reason. He had the mumps. When the match was rescheduled, Saxton found an equally good reason for calling it off but didn't take advantage of it. He was under sentence to jail.

Fined \$600 and given a 15-day sentence for ignoring a raft of traffic summonses, Saxton talked a New York court into leaving him at liberty until he could fight Gavilan on October 20. Since the time of Yankee Sullivan a century ago, plenty of jailbirds have fought for titles. Up to Saxton's time, the record books listed no instance of a jailbird-elect fighting for a championship. After winning the decision and title in a wretched exhibition, Saxton

persuaded the judge to suspend the jail sentence.

As every year must, 1954 meant the last of some headlined sports figures. Ted Williams insisted it was his last season of baseball but some of the men who knew him best took the announcement with mental reservations. There was no doubt at all about Native Dancer, greatest race horse of his time and the most popular (because of television) of any day.

Suffering a recurrence of the sore foot that shortened his 1953 campaign, the glamorous gray was returned to stud on Alfred Gwynne Vanderbilt's Sagamore Farm in Maryland. As though to balance the scales, Sugar Ray Robinson, the best fighter of his generation, announced his unretirement after two years as a song-and-dance man.

Among the 3-year-olds of 1954, there was no such standout as Native Dancer had been a year earlier. A little California horse, Determine, won the Kentucky Derby, and an hour or two later a stablemate won another \$100,000 race on the Pacific Coast.

Possibly this unprecedented double persuaded Andy Crevolin, owner of the winners, that no metal could touch him. At any rate, he submitted to a tape-recorded interview in which he confessed, among other things, that his stable didn't try to win with a young horse the first 2 or 3 times out, preferring to educate the horse (and those who bet on him) in the facts of racing. Scandalized California racing authorities suspended Crevolin and his stable temporarily.

Determine passed up the Preakness, second item in the 3-year-olds' spring triple, and that stakes went to Hasty Road, the blaze-faced colt that was second in the Derby. Then the clever veteran among trainers, Max Hirsch, sent a newcomer named High Gun out to win the Belmont Stakes, and when autumn arrived High Gun still looked best of the lot.

Meanwhile a handsome bay 2-year-old

was picking up some of the following Native Dancer left behind. This was Nashua, trained by 80-year-old Sunny Jim Fitzsimmons and ridden by Eddie Arcaro. In 60-odd years on the turf, Mr. Fitz had had winners of virtually every American race of note except Saratoga's Hopeful and Belmont's Futurity. Nashua expunged the exceptions, became the long-range pin-up colt of 1955.

College football lost a personage who occupied a position comparable with Native Dancer's on the track. Frank Leahy, coach of almost unbeatable Notre Dame, took heed when an abdominal spasm knocked him out during the Notre Dame-Georgia Tech game of 1953. He retired, succeeded by 26-year-old Terry Brennan, a Notre Dame halfback of recent vintage.

"Why did you pick Brennan as your successor?" Leahy was asked.

"I didn't," he said. "The priests at Notre Dame did. Every man on my staff was capable of handling a job as head coach for any college. I wrote a letter describing each man's qualifications as I saw them. Then the fathers made their own decision."

"You don't think for a moment," it was suggested, "that your letter conditioned their thinking?"

Mr. Leahy suddenly became interested in a picture on the wall.

In its first game under Brennan, Notre Dame polished off a powerful adversary, Texas. Then Notre Dame lost to Purdue, and the heat was off the young coach. From here on his teams would win or lose, same like anybody else's.

Vic Seixas, 31-year-old heir to a Philadelphia bathtub fortune, won the national tennis championship. Ed Furgol, a professional with a withered arm, took the National Open golf title. This was a great victory, encompassing the defeat of a genuinely great competitor—Ben Hogan. We may not see Ben's like again.

## 1954: THE YEAR OF NONFICTION

by JOSEPH HENRY JACKSON

Book Critic, *San Francisco Chronicle*

SIX OR EIGHT years ago it seemed that, with the war safely past, American fiction might well be in for a vigorous renewal. There was in fact a flurry; several new young novelists appeared, all notably articulate and all technically able, and it looked as though a fresh generation might have something important to say in fiction.

It did not happen. Too many of the new

young men shot their bolt in their first novels. Too many of the older ones were bewildered by the rapidly changing world. As 1954 came to its close, the popular sport among critics was the holding of symposiums on such questions as "Is the novel dead?"

Laments are doubtless premature. The year saw such fine fiction as Harriette



Arnow's *The Dollmaker* and Wright Morris's *The Huge Season*. There was William Faulkner's uneven yet towering fiction-edifice, *A Fable*. A 35-year-old first novelist, Milton Lott, turned up with *The Last Hunt*, a tale of the last days of the buffalo, to which he brought a maturity seldom granted to first novelists and even more seldom applied to a theme so easily confused with the "Western." In spite of these and a few more, the fiction-level was mediocre-to-low.

Various reasons have been assigned for this. Book publishing is not actually big business; its annual take is something like half of that of the dog-food industry, for instance. But it is big enough so that, when economic pressures tend to make mediocrity the safest commodity, publishers' selections can affect American reading to a considerable degree. In 1954, partly due to the mushrooming growth of soft-cover book publishing, the regular publishers by and large plumped for formula-fiction as at least a fairly sure bet—and the safest in that field is the standard "historical" costume-piece, which reached a kind of costumed (and uncostumed) peak. For this and other reasons—chiefly perhaps a generalized public uneasiness about today's world which was translated into the desire to know more about it—nonfiction found a new and surprisingly large body of readers.

A good deal was frankly of the escape sort. There was the exciting and very well done *Of Whales and Men* by R. B. Robertson. There were the mountain-climbing books, headed by Sir John Hunt's *Conquest of Everest*, and there was a parallel upturn in books about far places; Heinrich Harrer's *Seven Years in Tibet* was one of the really good ones. There were a dozen or so now-it-can-be-told narratives concerning war adventures; here the best came out of England, with Ewen Montagu's *The Man Who Never Was* a prime example. And there was a sound literary-historical performance of an exceptionally high order, *The Reason Why*, in which an English-woman, Cecil Woodham-Smith, examined in fascinating detail the background of the disastrous charge of the Light Brigade in the Crimean War.

But it was serious nonfiction, informative, sometimes hortatory, always purporting to answer the reader's questions about his world, that led the lists.

Elmer Davis's *But We Were Born Free* remained a country-wide best-seller for months. Among several thoughtful analyses of modern man and where he seems to be going, *The Measure of Man* by Joseph Wood Krutch was least dogmatic, best written, and best calculated to help bridge the gap between the social philosopher and

the lay reader. Two men, both widely influential among American opinion makers, published books made up of lectures they had delivered to university audiences. One was Adlai Stevenson's nonpartisan *Call to Greatness*, the other was George F. Kennan's *Realities of American Foreign Policy*; both urged a more honest facing of world situations, greater awareness that the idea of world-without-conflict may remain long unattained, and especially an intelligent humility as the basis of any American approach in dealings with other nations, particularly our potential friends.

The last four volumes of Arnold Toynbee's massive *Study of History* appeared late but reached an audience far larger than the most sanguine publisher of such a work could have hoped for, even a few years ago. Pearl Buck's autobiographical *My Several Worlds* was expected to reach the large body of her admirers; but it found many more who read it because they were troubled about Asia and hoped to make contact through a writer who knew that continent at first hand. This was true also of *The Memoirs of Aga Khan*, even after it became clear that the book was no gossipy chitchat by a rich man who liked horse-racing, but a serious commentary on Far Eastern politics from the viewpoint of one who took part in large affairs for more than half a century as leader of some 70 million Ismaili Muslims.

Americans, moreover, wanted to understand more of the less familiar parts of their own country, not only politically but physically, wherefore they read (to note only two among many) such outstandingly well done books as Wallace Stegner's *Beyond the 100th Meridian* and Paul Horgan's poetically written and richly informed *Great River: The Rio Grande*, both of which related regional understanding to the whole American scene.

In sum, then, the swing to nonfiction in 1954, although partly due to publishing economics and lessened confidence in our novelists, also derived from the phenomenally larger number of Americans who wanted to form opinions (and perhaps relieve their fears) and so needed background information to help them. The eager reception accorded books about The Bomb and several discussions of global strategy—Thomas Finletter's *Power and Policy*, for example—confirms this belief.

Yet it is plain that in the public's judgment, expressed in what it actually read in 1954, the novel is running weakly. Barring a powerful reorientation, which can come only through the presence on publishers' lists of novels with something serious to say, the present trend may well continue in 1955, and fiction will find itself again in a poor second place.

## TELEVISION-RADIO

by MERRILL PANITT

Managing Editor, TV Guide

**I**N THE AVERAGE home, surveys reported, Americans spent more time sleeping or working than they did watching television—but not much more. The exact figures were 5 hours a day during peak winter viewing months and 3 hours and 40 minutes a day during the summer ebb.

They watched *I Love Lucy* and *Dragnet*, *The Lone Ranger* and *Comedy Hour*, *Superman* and *Howdy Doody* and Arthur Godfrey. They also watched what proved to be a combination of these—the Mundt Committee Hearings on Senator Joseph R. McCarthy and Army Secretary Stevens.

While the television industry busied itself with plans for adding color to the sight-and-sound medium and producing elaborate star-studded "spectaculars" and "extravaganzas," housewives parked in front of their television sets for weeks to follow the big soap opera from Washington. When it finally ended, the ladies went back to their housework, each of them happily convinced that the men they had picked as heroes were still heroes and the ones they had labeled villains were still villains.

To the public, the introduction of color television was interesting, the way a chinchilla coat is interesting. Demand from consumers was practically nonexistent, for the first sets introduced bore a \$1,000 price tag and boasted a 12-inch picture—about half the size of the average black-and-white picture.

So, partly to arouse more excitement over color, and partly to add some variety to television entertainment, NBC's president, Sylvester (Pat) Weaver, announced that his network would colorcast a series of once-a-month "spectacular" programs featuring movie and stage stars in their TV debuts. CBS promptly grabbed the ball by announcing a series of color "extravaganzas" and ABC hired Walt Disney as an antidote.

Some of the first spectaculars and extravaganzas were, at least, artistic successes. All but the few industry executives who had color sets in their homes, and the few thousand curious viewers who watched color sets in dealers' showrooms, saw the programs in black and white. But newspaper critics weren't always too kind, and most viewers considered each \$250,000 production another show, to be dialed in only if it promised to be better than what was on competing stations.

There was no doubt about it, though.

Color was definitely on its way. Two companies began manufacturing 21-inch color tubes, and before too long, they promised, sets would sell for \$500. The networks continued their spectaculars and extravaganzas, and telecast more and more of their regular shows in compatible color.

Meanwhile, back in the living room, the ladies were "oh'ing and 'ah'ing over Liberace, a chubby, toothy, wavy-haired piano player whose virtuosity at winking into a camera, some thought, exceeded his piano technique. That other great favorite of the ladies, Arthur Godfrey, made headlines by conducting the most public firing since Lincoln dismissed McClellan.

One of Godfrey's male vocalists, Julius LaRosa, had hired himself an agent. He also was in love with one of Godfrey's female vocalists—who happened to be married. Godfrey fired LaRosa in full view of his television audience and within earshot of his radio audience. A few months later Godfrey, flying his own plane, buzzed an airport tower in New Jersey. For this he got more headlines and suspension of his pilot's license.

Betty Hutton did one television show, her debut in the medium, and promptly announced she was retiring not only from television, but from all of show business. Jackie Gleason slipped during a comedy skit and broke a leg—on the air. During a rehearsal Red Skelton ran head-on into a trick door that was supposed to fall apart. It didn't and he went to the hospital with a concussion. Mario Lanza sang beautifully during an extravaganza but it turned out that he was merely moving his lips in time to recordings made several years earlier. Wally Cox got married—on and off the air—so that now there is a Mrs. Peepers and a Mrs. Cox.

Television shows covered life—real and fictional—literally from the womb to the tomb. *Medic* (so closely patterned after the realistic *Dragnet* that wags promptly labeled it "Drugnet") presented a Caesarian birth. Dr. Francis Horwich's *Ding Dong School*, *Howdy Doody*, *Pinky Lee* and others acted as TV baby sitters. There were educational programs on local stations and networks for school-age children, and TV covered the adventures of teen-agers in *Meet Corliss Archer*, *Father Knows Best* and a slew of others. For those who were engaged to marry, there was *Two in Love* ("Tell all about how he proposed and win prizes"); and for those who favored a wed-



ding on TV, *Bride and Groom* was at hand. When you had children but couldn't afford them, succor was offered by *Strike It Rich*. If you needed appliances or a nest egg for middle age, *On Your Account*, *Dollar a Second*, *Beat the Clock*, *Stop the Music* and *Break the Bank* came to the rescue. *Life Begins at Eighty* was for oldsters; and for those interested in funny adventures even after death, *Topper* starred ghosts.

The dramatic programs already had skimmed through most plays in the public domain, from Aeschylus to Ibsen, but they found some more and could always repeat Shakespeare. Then they did Broadway hits, Broadway flops and some plays that couldn't have reached Broadway by any stretch of even a TV producer's imagination. Robert Sherwood, Ben Hecht, William Faulkner and other literary lights tried writing TV plays but flopped. Yet unknowns like Paddy Chayevsky, Robert Alan Aurthur and Horton Foote ground out TV play after TV play and scored with critics. New books, old books, books that hadn't been published yet were adapted for the medium—and still the problem was material. The gaping entertainment maw could not be satisfied—but the schedule read 8 hour-long dramas a week and the shows had to go on. Sometimes one wondered why.

There really were no startlingly new ideas. *Dragnet* had been a success showing Los Angeles detectives at work, so the new shows included *Medic* (Los Angeles doctors at work), *Alarm* (Los Angeles firemen at work) and *Lineup* (a switch—San Francisco detectives at work). *I Love Lucy*, already imitated, copied and rewritten for other situation comedies, turned up in still more guises.

Sid Caesar and Imogene Coca, successful

comics together, fell prey to declining ratings and split up. Caesar got a show of his own. So did Miss Coca. Critics agreed there was something lacking in their new programs—each other. Bob Hope's contribution to TV comedy was chiefly osculatory (his writers kept him busy bussing his pretty guest stars when they ran out of jokes), and Milton Berle continued to offer the new, humble Berle.

One bright new comic stood out like a thoroughbred in a glue factory corral—George Gobel. Without slapstick or fanfare, he was funny.

As usual, home television had 39 weeks of good entertainment during the cool months and 13 weeks of repeats, quizzes and other time-fillers during the summer. The industry simply couldn't forget its background—radio and its yearly summer hiatus—and no one was daring enough to offer a really good summer schedule to attract viewers.

As for radio, its summer entertainment hiatus was stretching into fall, winter and spring. Disc jockeys and soap operas filled the air during the days, warmed over dramas and whodunits during the nights—until the disc jockeys took over again. There was even room for some fine (unsponsored) music.

But many radio stations were making more money than ever before. No broadcaster looks forward to great profit from network shows, and the number of network shows was steadily decreasing. The more time spent on local disc jockeys and local advertising, the more money flows into a station's coffers. So in 1954, radio was a profitable business indeed. Not too entertaining for the listener, of course, but business is, after all, business.

## THEATER

by LOUIS KRONENBERGER

Drama Critic, *Time Magazine*

WHATEVER VERDICT the history books may bestow upon the past year on Broadway, there is no doubt of its almost spectacular superiority over the year that preceded it. During that deplorable earlier period, it proved something of an achievement for a show not to be downright bad; during the more glowing stretch of which I write some twenty-odd productions have, at the very least, been easy to sit through. Recently, indeed, there has been an absolute spate of adequacy, an over-abundance of slightly-better-than-average. Play after play has at any rate been good enough to start an argument.

But the striking and encouraging fact is less how superior the past year seems in relation to its predecessor than how different. The difference, in the future perspective of history, may well seem a matter of geography. For what broke down last year was happily not Broadway itself, but the rigid and rather comically snobbish distinction between Broadway and Off-Broadway. Where a show lived ceased to be the key to what it was: the Lower East Side suddenly had a certain dash, Greenwich Village a certain propriety. Much the most encouraging single event in the recent theater is the founding of the Phoenix on

lower Second Avenue—an organization that, even in its upsy-downsy first year, was always plainly working with something, and toward something. There were vital flaws in its production of, say, *Coriolanus*, but the important thing was that *Coriolanus* got produced. And at least once, with a musical that went on to Broadway—with *The Golden Apple*—the Phoenix offered something very successfully individual.

And other Off-Broadway productions—Calder Willingham's *End as a Man*, Alfred Hayes' *Girl on the Via Flaminia*—not only got to Broadway but also contributed something alive and refreshing. And on Broadway or off, it became a year of promising newcomers and of interesting first plays: not only *End as a Man* and *The Girl on the Via Flaminia*, but Jane Bowles' brilliantly imperfect *In the Summerhouse*, Louis Peterson's chronicle of a young Negro's growing up, *Take a Giant Step*, Julian Foss' spotlighting of "Madison Avenue" careerism, *The Magic and the Loss*; and most successfully in box-office terms, Robert Anderson's tale of a prep-school boy unjustly accused of homosexuality, *Tea and Sympathy*. These newcomers proved a very saving thing, for virtually none of Broadway's better-known old-timers—whether Robert Sherwood or Arthur Miller or John van Druten or Moss Hart or Lillian Hellman or Tennessee Williams or Thornton Wilder or George Kelly or Mary Chase—so much as put in an appearance. Among all the hits of '53-'54, about the only old-timer to be represented was George S. Kaufman with *The Solid Gold Cadillac*; and even he collaborated with Howard Teichmann.

The odd thing about such a better-than-average period is the number of things it didn't feature or even include. Besides the dearth of name playwrights, there was a decided dearth of musicals, there was an almost total lack of thrillers, and—on Broadway itself—a complete lack of revivals. But if neither *Hamlets* nor whodunits, there has yet been a fair enough showing in terms of comedy and of drama alike—with the newcomers forming the backbone of the drama squad. If the biggest smash of all, John Patrick's *Teahouse of the August Moon*, is a comedy, the next biggest, *The Caine Mutiny Court Martial*, is a piece of excellent theater. Comedy has turned up in a great variety of forms—not only the usual domestic and farcical trifles, but philosophical comedy in T. S. Eliot's *Confidential Clerk*, psychoanalytical comedy in Edward Chodorov's *Oh Men, Oh Women*, the comedy of manners in Samuel Taylor's *Sabrina Fair*, and in Liam O'Brien's bigamistic *The Remarkable Mr. Pennypacker*, a sort of Double-Life with Father. And if comedy, in *Teahouse*, gave

Broadway its biggest popular lift, it also in *Kind Str* (with Mary Martin and Charles Boyer) gave it its biggest letdown.

*Kind Str* is one of several events that have made for an era of mild surprises. Quite as unforeseen was the triumph, on the last night of the '53-'54 season, of the musical *Pajama Game*; and the success, very early in '54-'55, of the British spoof of musicals in the '20s, *The Boy Friend*. Nor could even his warmest night-club admirers have supposed that Victor Borge's one-man show would still be flourishing a year after it opened. Surprising, too, was the fate of *Kismet*, a lush fandango that was never reviewed because of the newspaper strike, and that, in defiance not so much of the critics as of commonsense, became a tremendous smash. Not so surprising is the success of a tinny trifle called *Dear Charles*, since it provides a field day for Tallulah Bankhead. And leading ladies have generally enriched the scene—whether Audrey Hepburn in *Ondine*, Deborah Kerr in *Tea and Sympathy*, Ina Claire in *The Confidential Clerk* or Shirley Booth in *By The Beautiful Sea*.

The season now advancing got off to nothing vast in the way of trends or triumphs. Having established itself as a place worth visiting, Off-Broadway was full of plans for soirees. Having enjoyed a period of relative privacy, musical comedy was very much back in the public eye: among its major events were *Fanny*, with an S. N. Behrman-Joshua Logan book and a Harold Rome score; *Silk Stockings*, with a book by Mr. & Mrs. George S. Kaufman and a Cole Porter score; and *The House of Flowers*, with a book by Truman Capote and music by Harold Arlen. And several oldtime playwrights—Maxwell Anderson, Clifford Odets, Noel Coward and Sidney Kingsley among others—had also arranged to be seen in public.

As for the prevailing somewhat-better-than-average level of achievement, it perhaps signifies that any number of plays have good writing in them, and any number of others have good playwrighting, but that extremely few have both. Too many effective theater pieces, like *Tea and Sympathy*, quite lack distinction; too many talented performances with language, like *In the Summerhouse*, aren't really plays. This glaring division plainly suggests that the "natural" playwrights have too much of the mere carpenter about them, while the natural writers—many of them primarily fiction writers—have a great deal to learn about the theater. As between the two, if producers really seek quality, it is the born writers who deserve particular help. For the skill they need to become good playwrights can be acquired, where the talent needed to become a good writer cannot.



## MOVIES

by T. H. WENNING

Movie Critic, Newsweek

BACK IN 1950, producers and exhibitors joined forces to ballyhoo pictures under the rousing slogan, "Movies Are Better Than Ever." They weren't, and the campaign didn't fool anybody. The industry had to wait almost until 1954 before it could start pointing with legitimate pride, and by that time Hollywood didn't need any catch phrase to market its product. Making fewer films, and making them with more attention to story and quality, producers found that TV competition was more of a spur than a threat; that the choice fewer pictures commanded larger grosses than twice as many of the wholesale harvest.

The chances are that the potential movie public was a little sated with TV and just about ready to return to its former loyalty. But perhaps the biggest factor in luring the customers out of their parlors was CinemaScope, 20th Century-Fox's clamorously publicized parlay of the wide screen and the anamorphic lens. It came at the psychological moment. Three-D had caused a flutter of excitement, and a few 3-D pictures made money on their novelty value. But the public didn't take to wearing uncomfortable polaroid glasses, and the general story level of 3-D films was so primitive that this particular form of projection in depth disappeared unmourned.

In contrast, CinemaScope's first offering, *The Robe*, promised to become one of the greatest box-office attractions of all time; and since that auspicious start, the anamorphic lens has taken a firm hold on film exhibition throughout the world.

In October of 1954, Paramount, with *White Christmas*, introduced another process called VistaVision, which gave the wide screen added height, clarity of color and a sharper definition of image. With the release of *The Big Rainbow*, RKO offered another technique, Superscope, which proved to be compatible with both wide screen and CinemaScope's projection equipment. Meanwhile Cinerama, the first in the field, wound up its second year as a box-office bonanza. Although *This Is Cinerama* has been exhibited in only 13 major cities, it drew more than 9,000,000 customers for a tariff of over \$17,000,000.

The stuff that the year's celluloid dreams were made of didn't show any notable trends beyond the aforementioned attention to quality, increased footage and an understandable weakness for the kind of

story material that could fill up the wide screen with spectacle and scenery. And *Gone With the Wind* took to the wide screen for its fourth tour of the country, and promised to add another 6 or 7 million dollars to its record-breaking gross of \$26,000,000.

Two of the year's truly notable films were *On the Waterfront* and *The Caine Mutiny*. The first starred Marlon Brando in what is probably the best performance of his career, and introduced Eva Marie Saint, a talented newcomer from TV. Directed by Elia Kazan and written by Budd Schulberg, this realistic and absorbing exposé of gangsterism along the New York waterfront looks like a ripe field for Academy Awards. Similarly *The Caine Mutiny*, produced by Stanley Kramer, was a shrewd job of shaping Herman Wouk's fully-packed best-seller to the exigencies of the screen without losing any of the novel's drama and fine sense of characterization.

Alfred Hitchcock was represented by two slick melodramas—*Dial M for Murder*, and *Rear Window*—this last measuring up to the best exercise in suspense the Old Master has ever turned out. (Both films co-starred Grace Kelly, who, along with Audrey Hepburn, is one of the few new players Hollywood has found with the talent and the personal magnetism to rate genuine stardom.)

Of other first rate dramas and comedies there were plenty: *Executive Suite*, *Beat the Devil*, *Broken Lance*, and *Suddenly!*, a taut little melodrama in which Frankie Sinatra demonstrates that his fine performance in *From Here to Eternity* was no flash in the pan.

Billy Wilder improved on the stage hit, *Sabrina*, with a large assist from Audrey Hepburn. Danny Kaye's *Knock on Wood* was his funniest comedy to date, and *It Should Happen to You* not only gave Judy Holliday a calculated field day but, in Jack Lemmon, discovered a young actor with an infinite capacity for being amusing. Riding high in the documentary field, Walt Disney released *The Vanishing Prairie*, the second in his remarkable series of full-length nature studies.

The foreign invasion maintained a steady pressure, adding to the gaiety of the nation without threatening any dangerous competition. Italy's *Bread, Love and Dreams* increased the prestige of Gina Lollobrigida as a glamor girl and a box-

office attraction. France, while not matching its previous years, was able to send such worthy emissaries as *The Earrings of Madame De*, *Mr. Hulot's Holiday* and *The French Touch*. England came off cheerfully with the delightful *Genevieve*, *Hobson's Choice*, *The Pickwick Papers*, *The Little Kidnappers*, *High and Dry*, and an extraordinarily handsome Italian-made version of *Romeo and Juliet*. *Ugetsu*, Japan's single entry, attracted the same people who were impressed with the brilliant *Roshomon* of 1952.

The problem of censorship within and without the movie industry presented an apparently insoluble problem. The Supreme Court upset state bans on the films *La Ronde* and *M*, but a half dozen censor boards announced their determination "to continue to bar objectionable films in

terms of our respective state laws." In a letter to Eric Johnston, president of the Motion Picture Association of America, Samuel Goldwyn sought to have the film industry liberalize its own self-imposed code of morality: "Unless the code is brought reasonably up to date, the tendency to by-pass it, which has already begun, will increase." Late in the year the MPAA came up with what it undoubtedly regarded as a big step in the right direction. New amendments permitted the treatment of miscegenation and the use of hard liquor on the screen—"within the limits of good taste." The board also removed the ban against the use in dialogue of such basic words as "hell," "damn," "fanny," and "nerts," and, as a greater concession, permitted jokes about traveling salesmen and farmers' daughters.

## HEADLINE STORIES OF 1954

### EISENHOWER RECORD

In August 1954, soon after the 83rd Congress adjourned, President Eisenhower made a radio-television speech saying every American "can be proud" of its record. According to his figures, the Administration program was embodied in 64 legislative projects, and 54 of them were enacted into law. The President said that made the batting average .830.

In some instances, however, the bills as passed did not fully correspond to what the Administration had requested. Following is the record on major legislation:

#### SUBSTANTIAL ADMINISTRATION VICTORIES

**St. Lawrence Seaway**—Participation with Canada in development of the waterway was authorized.

**Tax reform**—Tax laws were extensively revised, with \$1.3 billion in relief granted to corporations and individuals.

**Farm price supports**—Instead of a rigid 90% price support for 5 major crops, the support level was made flexible at 82½% to 90%. The Administration had asked for 75% as the minimum.

**Social Security**—The system was expanded to give old-age pensions to 10 million more, mostly farmers.

**Atomic energy**—The law was revised to allow exchange of data with friendly nations, and to permit private industry to develop atomic power.

**Antisubversive measures**—Peacetime espionage was made punishable by death.

Witnesses can be forced to testify under certain conditions by granting them immunity. Citizenship is to be revoked for those convicted of conspiracy to overthrow the government. Communist-infiltrated labor unions are to be deprived of government protection of their rights. The Administration failed to get a law to permit wire-tap evidence in espionage cases. The Administration did not request, but did get, a law depriving the Communist party of all legal rights.

**Housing**—Congress authorized 35,000 public housing units in one year, but hedged about with restrictions. The President had asked for 140,000 units in the next 4 years.

**Foreign trade**—The Reciprocal Trade Agreement Act was extended for one year instead of 3; the President failed to get authority to make additional tariff cuts.

**Mutual aid**—Requested funds were cut to \$5.2 billion.

#### ADMINISTRATION DEFEATS

**Labor**—Revision of the Taft-Hartley law was pigeonholed in the Senate.

**Voting age**—A Constitutional amendment to give the vote to 18-year-olds failed in the Senate.

**Statehood**—Granting statehood to Hawaii failed in the House.

**Health**—Congress refused a \$25-million Federal fund for a health reinsurance program to extend private systems.



## INDO-CHINA STORY

**T**HE FRENCH won control of Indo-China in the 19th century, and lost it to the Japanese in World War II. The native peoples had resented French exploitation, and when Japan surrendered, they proclaimed independence. Since no French troops were available, British forces moved into Indo-China, restored order and handed it back to French authorities early in 1946.

Late in 1946, the native nationalists started the warfare against the French which was to continue until 1954. In the beginning there were relatively few Communists, but with techniques taught by Moscow they wormed their way into the native nationalist movements. The leader was Moscow-trained Ho Chi Minh.

The war dragged on in a weary stalemate over the years. The great difficulty of the French was that they did not have the support of the population as a whole. In an effort to win the people, the French reluctantly, bit by bit, granted more self-government. The U. S. kept urging France to do so. By 1954, the 3 Associated States of Indo-China—Viêt-Nam, Laos and Cambodia—were technically independent states within the French Union. But France supervised their foreign and military affairs. The nominal chief of state of Viêt-Nam was former Emperor Bao Dai, who was installed by the French in 1949. He did not succeed in arousing the enthusiasm of the people.

In 1950, both the Soviet Union and Communist China accorded diplomatic recognition to Ho Chi Minh and his rebel Vietminh regime. He then controlled substantial areas of Viêt-Nam; but there was no organized rebel movement in the two smaller states of Laos and Cambodia. Soon after Russia's recognition, the State Department announced that U. S. aid would be sent to Indo-China to develop "genuine nationalism." However, the Korean War broke out, and American aid started out as just a trickle. By 1954, the U. S. was ready to spend \$785 million to help France and Viêt-Nam in their losing fight against the Communist rebels. The American contribution had risen to approximately two-thirds of the cost of the warfare.

Despite American aid, the drain on France was terrific. Nearly one-third of the total French officer corps was involved. The combined French Union military forces in the field were estimated at 460,000, of whom 260,000 were Viêt-Nam soldiers. The rest were French regulars, units of the Foreign Legion, Senegalese and Moroccans.

Up until almost the end, the fighting

was mainly guerrilla warfare in mountains, jungles and rice paddies, with no fixed lines of battle. In 1954, the largest single battle was fought for Dien Bien Phu, an isolated fortress which the French had created in northwest Viêt-Nam. At Dien Bien Phu it became evident that Red China was supplying massive aid in military equipment to the Communist rebels—heavy artillery, antiaircraft guns and trucks of Russian make. On May 7, Dien Bien Phu and its garrison of at least 10,000 French Union forces fell to the Communists.

Shortly before that disaster, a conference had been convened in Geneva, Switzerland, on April 26, 1954, to seek peace in the Far East. Participants were the U. S., Britain, France, Russia, Communist China and the 3 states of Indo-China.

The conference bogged down until June, when France got a new Premier, Pierre Mendes-France; and he announced his determination to get peace in Indo-China by July 20 or else resign. The armistice agreements were signed on July 21, only a few hours after his deadline.

Under the truce terms, France surrendered to the Communist Vietminh the northern half of Viêt-Nam from the 17th parallel up to the border of Red China. This lost area of about 60,000 square miles had a population of 14 million. It included Hanoi, largest city of northern Indo-China, and the seaport of Haiphong. The agreement called for holding elections throughout all of Viêt-Nam in 1956. The two smaller states of Laos and Cambodia were left virtually intact, free of Communist rule.

The U. S. declined to sign the truce terms on the ground that we would not be a party to handing people over to Communist control. However, we announced that we would respect the agreement and not try to upset it.

### Trieste

The map on page 417 went to press before the settlement of the Trieste dispute was reached. However, it illustrates approximately the division of the territory which was agreed upon. Italy received control over Zone A, which includes the city of Trieste and a coastal strip stretching north to the Italian border. Yugoslavia received Zone B (with a small addition from Zone A), which constitutes the hinterland south of the seaport. The withdrawal of American and British occupation troops was conducted in October. The Trieste settlement also came too late for notation under "Significant Changes in Political Status Since 1945" on page 427.

## MCCARTHY STORY

THE ARMY-MCCARTHY inquiry began on April 22, 1954, and ended on June 17 after more than two million words of testimony. It was televised in full across the nation for 187 hours, which set a record for Congressional hearings visible to millions.

The clash between Sen. Joseph R. McCarthy, Republican of Wisconsin, and civilian leaders of the Department of the Army arose out of the case of Dr. Irving Peress, an Army dentist who, on Jan. 30, 1954, appeared before the Senate Permanent Investigations Subcommittee headed by McCarthy and refused on grounds of possible self-incrimination, pleading the Fifth Amendment, to answer questions about Communist connections.

Peress had been drafted into the Army as a captain, and had been stepped up to the rank of major; an order for his honorable discharge had been issued Jan. 18, and the discharge was made effective Feb. 2. McCarthy regarded this as indication that the Army was "coddling" Communists, and sought to find out who was responsible. Brig. Gen. Ralph W. Zwicker, on the witness stand, refused to name Army officers involved in the promotion and discharge of Peress. McCarthy told Zwicker that he "should be removed from any command," and that he was "not fit to wear that uniform."

Secretary of the Army Robert T. Stevens interposed with a statement that he would never allow Army personnel to be "brow-beaten or humiliated." He ignored McCarthy's demand for names of officers in the Peress case. Shortly afterward, however, he was persuaded by Republican members of the investigating subcommittee to promise to supply the names.

On March 11, it became known that the Department of the Army had prepared a detailed and explosive report charging that McCarthy and Roy M. Cohn, chief counsel of his subcommittee staff, had exerted pressure on the Army over the course of 8 months to get favored treatment for G. David Schine, a former unpaid subcommittee consultant and close friend of Cohn. Schine failed to get a commission and was drafted.

McCarthy promptly struck back with accusations that the Department of the Army had attempted to blackmail him into halting investigation of the Army by threatening to make public the Schine report. He also said the Army used Schine as a "hostage."

After considerable Congressional discussion, it was decided that the charges and countercharges would be the subject of an

inquiry by the Senate Permanent Investigations Subcommittee itself. But for the duration of these hearings, Sen. McCarthy would step off the committee. Sen. Karl E. Mundt, South Dakota Republican, would be acting chairman. Other subcommittee members were Republican Senators Dirksen, Potter and Dworshak (the latter substituting temporarily for McCarthy) and Democratic Senators McClellan, Symington and Jackson.

The subcommittee employed as its special impartial counsel Ray H. Jenkins, of Knoxville, Tenn. The Army employed as its special counsel Joseph N. Welch, of Boston.

When the hearings began on April 22, Secretary of the Army Stevens was on the witness stand for the first 14 days. He said that since July 1953 there had been 19 conferences and 65 telephone calls between Army personnel and McCarthy or his aides regarding Schine. First the effort had been to get Schine a commission; later to get him passes to be absent from Fort Dix, N. J., ostensibly to do subcommittee work; and to get him assigned to New York. Stevens said: "The Schine case is only an example of the wrongful seeking of privilege, of the perversion of power."

Stevens denied under oath that he had at any time suggested that the subcommittee investigate the Navy or Air Force. Counselor Adams later made the same denial on the witness stand. Adams also testified that Cohn exploded with wrath when it was suggested that Schine might be sent overseas. Adams quoted Cohn as saying: "Stevens is through as Secretary of the Army. . . . We will wreck the Army."

It was not until late in May that Roy M. Cohn went on the witness stand, followed by Sen. McCarthy. They had developed their case against the Department of the Army to a considerable extent through questioning earlier in the inquiry, and as witnesses they stood by their allegations of an Army "blackmail attempt" to curb the subcommittee investigation.

A Constitutional issue was raised in the course of the hearings. The Constitution gives separate but equal powers to the Executive, Legislative and Judicial branches. The question—a perennial one—was: When does one branch encroach on the powers of another?

The issue arose following the introduction of a document by Sen. McCarthy, which purported to be a carbon copy of a letter written by J. Edgar Hoover, FBI director. It developed that Hoover had not written such a letter, but that McCarthy's document did contain 7 paragraphs identical with a section of a classified confi-



dential memorandum which the FBI sent to the Army in 1951, dealing with persons who were possible subversives.

McCarthy said he got the "letter" from a young intelligence officer whom he refused to name. Attorney General Brownell ruled that the Senator was not authorized to have possession of the classified information therein. McCarthy challenged the Executive branch by saying he would not be bound by their secrecy decisions. The Senator later expanded his position by saying he would continue to get information from within the Executive department whenever he could, and would protect his sources of the information. In effect, he invited Federal employees of the Executive branch to divulge to him any indications of wrongdoing, even though that might entail violation of law or Presidential directive.

With the support of President Eisenhower, a statement was issued by Attorney General Brownell, which said: "The Executive branch of the government has the sole and fundamental responsibility under the Constitution for the enforcement of our laws and Presidential orders. That responsibility cannot be usurped by any individual who may seek to set himself above the laws of our land or to override orders of the President of the United States to Federal employees of the Executive branch of the government."

On Aug. 3, the Senate Permanent Investigations subcommittee under the chairmanship of Sen. Mundt issued two reports—one by the 4 Republican members, the other by the 3 Democrats.

The 4 Republicans held that Sen. McCarthy was not shown to have been personally guilty of exercising improper influence on the Army in behalf of Pvt. Schine; but that Roy Cohn was "unduly aggressive and persistent" in behalf of Schine. Secretary of the Army Stevens was held not to have been guilty of bad faith, but to have "followed a course of placation, appeasement and vacillation . . . when he should have asserted himself" in resisting Cohn's efforts.

The Democratic report held that both McCarthy and Cohn "merit severe criticism"—McCarthy because he "fully acquiesced in and condoned" the "improper actions" of Cohn. Secretary Stevens was held to be not guilty of attempted blackmail, was severely criticized for "inexcusable indecisiveness and lack of sound administrative judgment" in his handling of the Cohn-Schine case.

Cohn had resigned as chief counsel to the investigating subcommittee on July 20. There were indications that a majority of the subcommittee would have voted to dismiss him had he not quit.

Meanwhile, in July, Sen. Ralph E. Flanders, Republican of Vermont, had made a series of charges against McCarthy on the Senate floor and had introduced a resolution to censure him. Instead, the Senate voted in August to create a select committee of 3 Republicans and 3 Democrats to weigh the charges. Named to the committee were Republican Sens. Arthur V. Watkins, Utah, chairman; Frank Carlson, Kans.; Francis Case, S. Dak. Democratic Sens. were Edwin C. Johnson, Colo.; John C. Stennis, Miss.; Sam J. Ervin, N. C.

Public hearings were held by the committee Aug. 31-Sept. 13.

The committee issued its unanimous report on Sept. 27, and recommended that the Senate censure McCarthy for conduct unbecoming a Senator on two counts. The first count pertained to his refusal to testify before a Senate investigating committee in 1952. The verdict of the Watkins committee was that he should in 1952 have explained whether funds collected to fight communism were diverted to "other purposes inuring to his personal advantage"; whether "certain of his official activities were motivated by self-interest"; and whether "certain of his activities in Senatorial campaigns involved violations of the law." McCarthy's conduct was held to be "conduct contumacious toward the Senate and injurious to its effectiveness, dignity, responsibilities, processes and prestige."

The other count on which censure was recommended pertained to McCarthy's treatment of Brig. Gen. Ralph W. Zwicker when questioning him. The committee said McCarthy's conduct "in reprimanding and ridiculing him, in holding him up to public scorn and contumely was inexcusable."

On 3 other counts the committee criticized McCarthy, but did not recommend censure. His invitation to Federal employees to give him confidential documents was "deemed improper." McCarthy was held to have "committed grave error" in offering to make public confidential FBI information at the Army-McCarthy hearings. And he was held to have made "highly improper" remarks about Sen. Flanders.

The Senate was called into special session November 8 to act on the Watkins committee report; that is, to vote censure or clear McCarthy. McCarthy predicted in advance that the Senate would vote to censure him. "I don't expect more than a very few Senators to go in there with an open mind," he said.

It was the old Senate of the 83rd Congress, not the new Senate, and therefore it contained Senators who were temporary appointees and others who would not sit in the new Senate by reason of defeat in the November 2 election.

## THE WESTERN EUROPEAN UNION

The European Defense Community treaty was signed in Paris in May 1952. It provided for a merger of the armed forces of France, West Germany, Italy, Belgium, the Netherlands and Luxemburg. The parliaments of 4 of the countries had ratified it by mid-1954. Ratification by France and Italy was lacking, but the Italian parliament was considered sure to ratify. On Aug. 30, 1954, France effectively killed the EDC by voting to break off indefinitely the debate on ratification.

A substitute for EDC was urgently sought by European diplomats. The objective was to find a formula by which the West German Federal Republic could rearm, subject to controls, and join the North Atlantic Treaty Organization. Anthony Eden, British Foreign Secretary, sponsored a plan to revise the Brussels Treaty of 1948 and invite West Germany and Italy into it. The original treaty bound 5 nations—Britain, France, Belgium, the Netherlands and Luxemburg—to go automatically to the aid of any signatory nation that might be attacked.

Eden's plan was adopted in substance at a conference of 9 nations which signed (subject to parliamentary ratification) the Protocol of London on Oct. 3, 1954. The U. S. and Canada participated in the conference along with the 7 aforementioned European nations.

The Protocol of London provided that West Germany was to receive sovereignty, join NATO and the Brussels Treaty Organization, and create an armed force of 500,000 men. Germany agreed not to manufacture atomic, chemical or biological weapons; or guided missiles, warships larger than 3,000 tons or bomber aircraft for strategic purposes. Britain agreed to maintain part of its armed forces on the European Continent as long as a majority of the Brussels Treaty powers deemed it advisable. Secretary of State Dulles promised that he would recommend continuing maintenance of American troops on the Continent.

The principles agreed upon at London were put into precise diplomatic language in the form of a 57-page set of agreements, schedules, protocols and exchange of letter, all of which were signed in Paris on Oct. 23. The name of the Brussels Treaty Organization was changed to the Western European Union.

On the same day, Premier Mendés-France and Chancellor Adenauer reached a settlement of the controversy between West Germany and France over the status of the Saar. The coal-rich Saar is to remain tied economically to France. Politically, it is to be autonomous, subject to the supervision of the Western European Union.

*For more details about the Saar, see page 638.*

## HURRICANES

THE NAME "hurricane" is derived from the West Indian term for "big wind," and is most frequently applied to massive storms that arise in the region of the Caribbean Sea. Pacific typhoons and Indian Ocean cyclones are related phenomena, according to the National Geographic Society. A hurricane is a whirlpool of air with winds from 75 to 150 miles an hour; in the center is a calm spot, or "eye." The hurricane season is from June through November.

A quarter of a century ago, the hurricane was most frequently associated with Florida and other parts of the southern sea frontier of the U. S. In 1938, a hurricane struck New England, taking about 500 lives. In 1954, no less than 3 hurricanes swept through states on and near the Eastern Seaboard.

Since 1953, the hurricanes have been called by names of girls in alphabetical order. Originally, they were called Storm One, Storm Two, etc., by the meteorologists. The names of girls proved to be more convenient in radio transmission from the Navy and Air Force planes that explored their courses in order to alert people to their paths. As many as 21 hurricanes have been known in a June-November season; the names of Una, Vicky

and Wallis have not yet been called into use.

There were the following hurricanes in the 1954 season:

1. Alice. Hit Mexico near the Texas border June 25.
2. Barbara. Blew out in the Caribbean July 28-30.
3. Carol. Hit Long Island and New England Aug. 31, causing 68 deaths and doing damage estimated at \$500 million.
4. Dolly. Went past New England, far out at sea Sept. 1-2. No damage.
5. Edna. Hit New England on Sept. 11. Estimated deaths: 11.
6. Florence. Blew out in the Gulf of Mexico Sept. 12.
7. Gilda. Like Florence, Sept. 26-27.
8. Hazel. Discovered near the island of Grenada off the top of South America on Oct. 5. Hit Haiti Oct. 12, causing an estimated 98 deaths. Hit the U. S. Oct. 15, moving from South and North Carolina up through Virginia, Maryland, the District of Columbia, Pennsylvania, New York and Canada, where it died out Oct. 16. Caused deaths in the U. S. estimated at 98 in 10 states and the District of Columbia. Deaths in Canada were estimated at 79.

*(A list of famous storms is on Page 739.)*



## UNITED NATIONS GENERAL ASSEMBLY

THE NINTH annual session of the United Nations General Assembly opened in New York on Sept. 21, 1954. The first meeting had barely started when Andrei Y. Vishinsky, Soviet Deputy Foreign Minister, introduced his familiar motion to admit Communist China to the U. N. and oust the Nationalist government on Formosa headed by Chiang Kai-shek. The U. S. moved to postpone any action on China until the following year. The postponement was voted, 43-11, with 6 nations abstaining.

Secretary of State Dulles, in his address at the beginning of the General Assembly session, invited the U. N. to sponsor a scientific conference in the spring of 1955 to consider how best to spread knowledge of the use of atomic energy for peaceful purposes. He said the U. S. program of pooling atoms-for-peace information included setting up an international agency open to all nations; also the U. S. would open an atomic reactor training school for scientists from friendly nations abroad. He noted that Russia has not indicated willingness to join an atoms-for-peace pool arrangement.

Vishinsky, in his opening address, laid before the U. N. a proposal for international reduction of armaments. His formula appeared to be a little nearer the point of view of the West than it was in earlier versions. He proposed a two-stage program of arms reduction, in which the first stage would be a lowering of the amount of military budgets and of the number of persons under arms. The second stage would include a ban on atomic and hydrogen bombs, with an international

commission empowered to make inspections.

The disarmament topic was debated for nearly two weeks, and then it was decided that a subcommittee which failed to get any agreement last summer would be reactivated and resume talk of arms reduction behind closed doors. Members: U. S., Britain, France, Canada and Russia.

Most of the items on the General Assembly agenda were familiar ones which had been discussed before. Among the new items were two territorial disputes.

1. Greece wanted possession of the island of Cyprus, which the British have made their foremost military base in the Mediterranean. Cyprus is a British crown colony. The population is Grecian, and Greece hoped for a plebiscite of the people of Cyprus to determine whether they wished to remain under British rule or rejoin Greece.

2. Indonesia demanded possession of West Irian, which is the western part of the island of New Guinea in Dutch possession.

Russia introduced two new items which apparently were designated for Soviet propaganda purposes. They were:

1. A charge that Nationalist China, with the support of the U. S., is committing piracy along the China coast by seizing foreign freighters, including one Russian vessel.

2. A charge that the U. S. has forcibly seized and occupied Formosa and is taking part in Chinese Nationalist raids against the Red China mainland.

## ELECTIONS OF 1954

THE Nov. 2 elections afforded some of the closest contests in many years. The Democrats captured control of the House of Representatives in the 84th Congress convening Jan. 3, 1955. Unofficial returns, subject to later recount, indicated that the Democrats might be able to take control of the Senate if they chose to do so. However, in the opinion of the President the elections did not signify a popular repudiation of his Administration, and he planned to press his program.

The Republicans lost 5 Senate seats and gained 3 on the basis of unofficial returns. That would make the standing in the new Senate: 48 Democrats, 47 Republicans and 1 independent, Wayne Morse, who had said he would vote with the Democrats on organizing the Senate.

In the House, the Democrats won con-

trol by a margin of 29 seats. That would enable them to name the chairmen of all House committees in the new Congress. The veteran Sam Rayburn, D., Texas, was in line to resume the Speakership which he lost two years ago to Joseph W. Martin, Jr., of Massachusetts.

In the gubernatorial elections, the New York race between Averell Harriman, D., and Sen. Irving M. Ives, R., was the closest ever. Harriman apparently won by an unofficial margin of 9,657, subject to official canvas. His victory failed to carry into office the Democratic candidate for State Attorney General, Franklin D. Roosevelt, Jr., who lost to Jacob K. Javits, R. (Roosevelt's brother, James, won a seat in Congress in California.) Close Senatorial elections occurred in the states of New Jersey and Oregon.

## SPECULATION ON THE CAREER OF THE 84TH CONGRESS

POPULAR BELIEF to the contrary, the party in power, at least since 1900, has not been turned out very frequently in between-terms elections. The fact is, in the past half century, in only 3 elections out of 13 did the ruling party lose control of one or both houses of Congress. In 1908, with a ticket headed by William Howard Taft of Ohio, the Republicans swept the Presidency, the lower house, and the Senate. In the between-terms elections of 1910, however, the Democrats were able to triumph in the lower house. In the 62nd Congress, elected in 1910, there were seated 228 Democrats and 162 Republicans; the Republicans, however, retained control over the Senate, their seats being 49 against 42 Democrats. Insurgency was notably strong in the Senate, and on many issues insurgent Republicans combined with the Democrats to frustrate the program of President Taft.

In 1918, after the Democrats had swept the Presidency and both houses in the previous election of 1916, and largely because of the unpopularity of President Wilson's plans for a world peace, the Republicans succeeded in winning both houses. To the 66th Congress the Republicans elected 237 members against 191 Democrats in the lower house. The Senate was also organized by the Republicans but by a narrow margin of one, for the Republicans had 48 Senators against 47 for the Democrats.

It was not until 1946 that again the party in power was repudiated as far as the Congress was concerned. President Franklin D. Roosevelt had died in April 1945, and he had been succeeded by Vice President Truman. Because of dissatisfaction with the continued existence of wartime controls, the Republicans succeeded in capturing both houses. In the Congress elected in 1946, the 80th Congress, there sat 246 Republicans to 188 Democrats in the lower house and 51 Republicans to 45 Democrats in the upper house.

Following the election of 1910, there was no significant legislation that could be carried by both houses, and indeed no efforts were made to do so because the Presidential veto would have been significant in overriding any such bills. But, the Democrats, by organizing the lower house and appointing powerful members at the head of committees, did yeoman work in preparing for the election of 1912 through public hearings and the preparation of

those bills which were enacted so quickly by Woodrow Wilson under the general banner of the New Freedom. It may be said, therefore, that one of the results of the capture of a between-terms elections is that through control over committees new legislative programs may be explored. This opportunity, obviously, will help the Democratic party in preparing for 1956.

The pattern was somewhat different following the election of 1918. In the 66th Congress that was returned, the chief center of interest was the nature of the peace and more particularly the Covenant of the League of Nations that Woodrow Wilson had brought back with him from Versailles.

In consequence, the Senate spent its time debating the character of the peace treaty and the Covenant for the League incorporated in it, and it ended up by rejecting both. In the area of domestic legislation, the Republicans also made ready for the victory of 1920. The House Ways and Means Committee sat down to prepare tariff legislation and in fact as soon as the Congress assembled following the election of 1920 (67th Congress) the Emergency Tariff Law of 1921 was passed.

In 1946, the Republicans captured both houses of the 80th Congress. It is interesting to observe that the legislation enacted by it was much more significant than had been that of other Congresses of this nature. This was largely due to the fact that Republicans, by combination with conservative Southern Democrats, were able to draw up bills which, while they were vetoed by President Truman, nevertheless were carried over his veto. This was notably true of the elimination of wartime controls and the passage of the Taft-Hartley Act. This Republican Congress also fulfilled many of its campaign promises of economy, and cut appropriations for the Agriculture and Interior Departments.

Certain general conclusions, therefore, may be drawn from these experiences. In the new 84th Congress, one may anticipate that the Democrats will introduce and possibly carry legislation in those areas which have attracted popular attention.

In the area of foreign policy, Democrats and liberal Republicans are more likely to uphold the hand of the President than was the case when the Congress was wholly Republican.

In any case, the Democrats are likely to use their victory to get ready for the contest of 1956.



## CONGRESS OF THE UNITED STATES

## PARTY STRENGTH IN 80TH TO 84TH CONGRESSES

## The Senate\*

## The House†

	80th 1947	81st 1949	82nd 1951	83rd 1953	84th 1955	80th 1947	81st 1949	82nd 1951	83rd 1953	84th 1955
Democratic .....	45	54	49	47	43	188	263	235	213	232
Republican .....	51	42	47	48	47	246	171	199	221	203
Other .....	0	0	0	1	1	1	1	1	1	0

\* 49 necessary for majority. † 218 necessary for majority.

## THE EIGHTY-FOURTH CONGRESS

## THE SENATE

The expiration date of each Senator's term is Jan. 3 of the year shown in parentheses. An asterisk (\*) indicates that the Senator was returned to office in the 1954 elections.

## ALABAMA

Lister Hill, D (1957)  
\*John J. Sparkman, D (1961)

## ARIZONA

Carl Hayden, D (1957)  
Barry M. Goldwater, R (1959)

## ARKANSAS

\*John L. McClellan, D (1961)  
J. W. Fulbright, D (1957)

## CALIFORNIA

William F. Knowland, R (1959)  
\*Thomas H. Kuchel, R (1957)

## COLORADO

Eugene Millikin, R (1957)  
Gordon Allott, R (1961)

## CONNECTICUT

Prescott Bush, R (1957)  
William A. Purtell, R (1959)

## DELAWARE

John J. Williams, R (1959)  
\*J. Allen Frear, D (1961)

## FLORIDA

Spessard L. Holland, D (1959)  
George A. Smathers, D (1957)

## GEORGIA

Walter F. George, D (1957)  
\*Richard B. Russell, D (1961)

## IDAHO

\*Henry C. Dworshak, R (1961)  
Herman Welker, R (1957)

## ILLINOIS

\*Paul H. Douglas, D (1961)  
Everett M. Dirksen, R (1957)

## INDIANA

Homer E. Capehart, R (1957)  
William E. Jenner, R (1959)

## IOWA

B. B. Hickenlooper, R (1957)  
Thomas Martin, R (1961)

## KANSAS

\*A. F. Schoeppel, R (1961)  
Frank Carlson, R (1957)

## KENTUCKY

Earle C. Clements, D (1957)  
Alben W. Barkley, D (1961)

## LOUISIANA

\*A. J. Ellender, D (1961)  
Russell B. Long, D (1957)

## MAINE

\*Margaret C. Smith, R (1961)  
Frederick G. Payne (1959)

## MARYLAND

John M. Butler, R (1957)  
J. Glenn Beall, R (1959)

## MASSACHUSETTS

\*Leverett Saltonstall, R (1961)  
John F. Kennedy, D (1959)

## MICHIGAN

Charles E. Potter, R (1959)  
Patrick V. McNamara, D (1961)

## MINNESOTA

Edward J. Thye, R (1959)  
\*H. H. Humphrey, D (1961)

## MISSISSIPPI

\*James O. Eastland, D (1961)  
John C. Stennis, D (1959)

## MISSOURI

T. C. Hennings, Jr., D (1957)  
Stuart Symington, D (1959)

## MONTANA

\*James E. Murray, D (1961)  
Mike Mansfield, D (1959)

## NEBRASKA

Carl Curtis, R (1961)  
Roman Hruska, R (1959)

## NEVADA

Alan Bible, D (1957)  
George W. Malone, R (1959)

## NEW HAMPSHIRE

\*Styles Bridges, R (1961)  
Norris Cotton, R (1957)

## NEW JERSEY

H. Alexander Smith, R (1959)  
Clifford P. Case, R (1961)

## NEW MEXICO

Dennis Chavez, D (1959)  
\*Clinton P. Anderson, D (1961)

## NEW YORK

Irving M. Ives, R (1959)  
Herbert H. Lehman, D (1957)

## NORTH CAROLINA

\*Sam J. Erwin, Jr., D (1957)  
W. Kerr Scott, D (1961)

## NORTH DAKOTA

William Langer, R (1959)  
Milton R. Young, R (1957)

## OHIO

John W. Bricker, R (1959)  
George H. Bender, R (1957)

## OKLAHOMA

\*Robert S. Kerr, D (1961)  
A. S. Mike Monroney, D (1957)

## OREGON

Wayne Morse, Ind (1957)  
Richard Neuberger, D (1961)

## PENNSYLVANIA

Edward Martin, R (1959)  
James H. Duff, R (1957)

## RHODE ISLAND

\*Theodore F. Green, D (1961)  
John O. Pastore, D (1959)

## SOUTH CAROLINA

Olin D. Johnston, D (1957)  
J. Strom Thurmond, D (1961)

## SOUTH DAKOTA

\*Karl E. Mundt, R (1961)  
Francis Case, R (1957)

## TENNESSEE

\*Estes Kefauver, D (1961)  
Albert Gore, D (1959)

## TEXAS

\*Lyndon B. Johnson, D (1961)  
Price Daniel, D (1959)

## UTAH

Arthur V. Watkins, R (1959)  
Wallace F. Bennett, R (1957)

**VERMONT**

George D. Alken, R (1957)  
 Ralph E. Flanders, R (1959)

**VIRGINIA**

Harry Flood Byrd, D (1959)  
 \*A. Willis Robertson, D (1961)

**WASHINGTON**

Warren G. Magnuson, D (1957)  
 Henry M. Jackson, D (1959)

**WEST VIRGINIA**

Harley M. Kilgore, D (1959)  
 \*Matthew M. Neely, D (1961)

**WISCONSIN**

Alexander Wiley, R (1957)  
 Joseph R. McCarthy, R (1959)

**WYOMING**

Frank A. Barrett, R (1959)  
 Joseph O'Mahoney, D (1961)

**CONGRESSIONAL COMMITTEES**

The day we went to press, it was still not certain which party would organize the Senate. We are, therefore, playing safe and listing the Republican Senators who served as Committee chairmen of the 83rd Congress and the Democratic Senators whom their party has named as probable committee chairmen of the 84th Congress, if the Democrats control the Senate.<sup>1</sup>

Since it was certain that the Democrats would organize the House, we list only the senior Democratic members of the House committees on the assumption that they are most likely to be chairmen of the committees.<sup>1</sup>

<sup>1</sup> Sometimes chairmanships are reassigned by agreement.

**Committees of the Senate****Agriculture and Forestry (15)**

Rep.: George D. Alken (Vt.)  
 Dem.: Allen J. Ellender, Sr. (La.)

**Appropriations (23)**

Rep.: Styles Bridges (N. H.)  
 Dem.: Carl Hayden (Ariz.)

**Armed Services (15)**

Rep.: Leverett Saltonstall (Mass.)  
 Dem.: Richard B. Russell (Ga.)

**Banking and Currency (15)**

Rep.: Homer E. Capehart (Ind.)  
 Dem.: J. W. Fulbright (Ark.)

**District of Columbia (9)**

Rep.: Francis Case (S. Dak.)  
 Dem.: Matthew M. Neely, (W. Va.)

**Finance (15)**

Rep.: Eugene D. Millikin (Colo.)  
 Dem.: Harry F. Byrd (Va.)

**Foreign Relations (15)**

Rep.: Alexander Wiley (Wis.)  
 Dem.: Walter F. George (Ga.)

**Government Operations (13)**

Rep.: Joseph R. McCarthy (Wis.)  
 Dem.: John L. McClellan (Ark.)

**Interior and Insular Affairs (15)**

Rep.: Hugh Butler (Nebr.)  
 Dem.: James E. Murray (Mont.)

**Interstate and Foreign Commerce (15)**

Rep.: John W. Bricker (Ohio)  
 Dem.: Warren G. Magnuson (Wash.)

**Judiciary (15)**

Rep.: William Langer (N. Dak.)  
 Dem.: Harley M. Kilgore (W. Va.)

**Labor and Public Welfare (13)**

Rep.: H. Alexander Smith (N. J.)  
 Dem.: Lister Hill (Ala.)

**Post Office and Civil Service (13)**

Rep.: Frank Carlson (Kans.)  
 Dem.: Olin D. Johnston (S. C.)

**Public Works (13)**

Rep.: Edward Martin (Pa.)  
 Dem.: Dennis Chavez (N. Mex.)

**Rules and Administration (9)**

Rep.: William E. Jenner (Ind.)  
 Dem.: Theodore F. Green (R. I.)

**JOINT COMMITTEE****Atomic Energy (18)**

Rep.: Repr. W. Sterling Cole (N. Y.)  
 Dem.: Sen. Clinton P. Anderson (N. Mex.)

**Committees of the House****Agriculture (33)**

Dem.: Harold D. Cooley (N. C.)

**Appropriations (50)**

Dem.: Clarence Cannon (Mo.)

**Armed Services (39)**

Dem.: Carl Vinson (Ga.)

**Banking and Currency (30)**

Dem.: Brent Spence, (Ky.)

**District of Columbia (25)**

Dem.: John L. McMillan (S. C.)

**Education and Labor (28)**

Dem.: Graham A. Barden (N. C.)

**Foreign Affairs (30)**

Dem.: James P. Richards (S. C.)

**Government Operations (30)**

Dem.: William L. Dawson (Ill.)

**House Administration (25)**

Dem.: Omar Burleson (Tex.)

**Interior and Insular Affairs (30)**

Dem.: Clair Engle (Calif.)

**Interstate and Foreign Commerce (31)**

Dem.: J. Percy Priest (Tenn.)

**Judiciary (30)**

Dem.: Emanuel Celler (N. Y.)

**Merchant Marine and Fisheries (30)**

Dem.: Herbert C. Bonner (N. C.)

**Post Office and Civil Service (25)**

Dem.: Tom Murray (Tenn.)

**Public Works (29)**

Dem.: Charles A. Buckley (N. Y.)

**Rules (12)**

Dem.: Howard W. Smith (Va.)

**Un-American Activities (9)**

Dem.: Francis E. Walter (Pa.)

**Veterans' Affairs (28)**

Dem.: Olin E. Teague (Tex.)

**Ways and Means (25)**

Dem.: Jere Cooper (Tenn.)



## THE HOUSE OF REPRESENTATIVES

The numerals indicate the Congressional Districts of the states, and the designation At-L means At-Large. An asterisk (\*) indicates that the Congressman was returned to office in the 1954 elections. The terms of all Representatives end Jan. 3, 1957.

## ALABAMA

1. \*Frank W. Boykin, D
2. \*George M. Grant, D
3. \*George W. Andrews, D
4. \*Kenneth A. Roberts, D
5. \*Albert Rains, D
6. \*Armistead I. Selden, Jr., D
7. \*Carl Elliott, D
8. \*Robert E. Jones, Jr., D
9. George Huddleston, Jr., D

## ARIZONA

1. \*John J. Rhodes, R
2. Stewart Udall, D

## ARKANSAS

1. \*E. C. Gathings, D
2. \*Wilbur D. Mills, D
3. \*James W. Trimble, D
4. \*Oren Harris, D
5. \*Brooks Hays, D
6. \*W. F. Norrell, D

## CALIFORNIA

1. \*Hubert B. Scudder, R
2. \*Clair Engle, D
3. \*John E. Moss, Jr., D
4. \*William S. Mailliard, R
5. \*John F. Shelley, D
6. John F. Baldwin, R
7. \*John J. Allen, Jr., R
8. \*George P. Miller, D
9. \*J. Arthur Younger, R
10. \*Charles S. Gubser, R
11. \*Leroy Johnson, R
12. B. F. Sisk, D
13. B. Charles Teague, R
14. \*Harlan Hagen, D
15. \*Gordon L. McDonough, R
16. \*Donald L. Jackson, R
17. \*Cecil R. King, D
18. \*Craig Hosmer, R
19. \*Chet Holifield, D
20. \*Carl Hinshaw, R
21. \*Edgar W. Hiestand, R
22. \*Joe Holt, R
23. \*Clyde Doyle, D
24. \*Glenard P. Lipscomb, R
25. \*Patrick J. Hillings, R
26. James Roosevelt, D
27. \*Harry R. Sheppard, D
28. \*James B. Utt, R
29. \*John Phillips, R
30. \*Robert C. Wilson, R

## COLORADO

1. \*Byron G. Rogers, D
2. \*William S. Hill, R
3. \*J. Edgar Chenoweth, R
4. \*Wayne N. Aspinall, D

## CONNECTICUT

1. \*Thomas J. Dodd, D
2. \*Horace Seeley-Brown, Jr., R

3. \*Albert W. Cretella, R
4. \*Albert P. Morano, R
5. \*James T. Patterson, R
- At-L. \*Antoni N. Sadlak, R

## DELAWARE

- At-L. Harris B. McDowell, Jr., D

## FLORIDA

1. William C. Cramer, R
2. \*Charles E. Bennett, D
3. \*Robert L. F. Sikes, D
4. Dante B. Fascell, D
5. \*A. S. Herlong, Jr., D
6. \*Dwight L. Rogers, D
7. \*James A. Haley, D
8. \*D. R. (Billy) Matthews, D

## GEORGIA

1. \*Prince H. Preston, D
2. \*J. L. Pilcher, D
3. \*E. L. Forrester, D
4. John J. Flynt, Jr., D
5. \*James C. Davis, D
6. \*Carl Vinson, D
7. \*Henderson Lanham, D
8. Mrs. Iris Blitch, D
9. \*Phil M. Landrum, D
10. \*Paul Brown, D

## IDAHO

1. \*Mrs. Gracie Pfost, D
2. \*Hamer H. Budge, R

## ILLINOIS

1. \*William L. Dawson, D
2. \*Barratt O'Hara, D
3. James C. Murray, D
4. \*William E. McVey, R
5. \*John C. Kluczynski, D
6. \*Thomas J. O'Brien, D
7. \*James B. Bowler, D
8. \*Thomas S. Gordon, D
9. \*Sidney R. Yates, D
10. \*Richard W. Hoffman, R
11. \*Timothy P. Sheehan, R
12. Charles A. Boyle, D
13. \*Marguerite S. Church, R
14. \*Chauncey W. Reed, R
15. \*Noah M. Mason, R
16. \*Leo E. Allen, R
17. \*Leslie C. Arends, R
18. \*Harold H. Velde, R
19. \*Robert B. Chipperfield, R
20. \*Sid Simpson, R
21. \*Peter F. Mack, Jr., D
22. \*William L. Springer, R
23. \*Charles W. Vursell, R
24. \*Melvin Price, D
25. Kenneth J. Gray, D

## INDIANA

1. \*Ray J. Madden, D
2. \*Charles A. Halleck, R
3. \*Shepard J. Crumpacker, R

4. \*E. Ross Adair, R
5. \*John V. Beamer, R
6. \*Mrs. Cecil M. Harden, R
7. \*William G. Bray, R
8. Winfield K. Denton, D
9. \*Earl Wilson, R
10. \*Ralph Harvey, R
11. \*Charles B. Brownson, R

## IOWA

1. Fred Schwengel, R
2. \*Henry O. Talle, R
3. \*H. R. Gross, R
4. \*Karl M. LeCompte, R
5. \*Paul Cunningham, R
6. \*James I. Dolliver, R
7. \*Ben F. Jensen, R
8. \*Charles B. Hoeven, R

## KANSAS

1. William H. Avery, R
2. \*Errett P. Scrivner, R
3. \*Myron V. George, R
4. \*Edward H. Rees, R
5. \*Clifford R. Hope, R
6. \*Wint Smith, R

## KENTUCKY

1. \*Noble J. Gregory, D
2. \*William H. Natcher, D
3. \*John M. Robson, Jr., R
4. \*Frank L. Chelf, D
5. \*Brent Spence, D
6. \*John C. Watts, D
7. \*Carl D. Perkins, D
8. Eugene Siler, R

## LOUISIANA

1. \*F. Edward Hebert, D
2. \*Hale Boggs, D
3. \*Edwin E. Willis, D
4. \*Overton Brooks, D
5. \*Otto E. Passman, D
6. \*James H. Morrison, D
7. \*T. Ashton Thompson, D
8. \*George S. Long, D

## MAINE

1. \*Robert Hale, R
2. \*Charles P. Nelson, R
3. \*Clifford G. McIntire, R

## MARYLAND

1. \*Edward T. Miller, R
2. \*James P. S. Devereux, R
3. \*Edward A. Garmatz, D
4. \*George H. Fallon, D
5. Richard E. Lankford, D
6. \*DeWitt S. Hyde, R
7. \*Samuel N. Friedel, D

## MASSACHUSETTS

1. \*John W. Heselton, R
2. \*Edward P. Boland, D
3. \*Philip J. Philbin, D
4. \*Harold D. Donohue, D
5. \*Mrs. Edith Nurse Rogers, R

6. \*William H. Bates, R
7. \*Thomas J. Lane, D
8. Torbert H. Macdonald, D
9. \*Donald W. Nicholson, R
10. \*Laurence Curtis, R
11. \*Thomas P. O'Neill, Jr., D
12. \*John W. McCormack, D
13. \*Richard B. Wigglesworth, R
14. \*Joseph W. Martin, Jr., R

**MICHIGAN**

1. \*Thaddeus M. Machrowicz, D
2. \*George Meader, R
3. August E. Johansen, R
4. \*Clare E. Hoffman, R
5. \*Gerald R. Ford, Jr., R
6. Don Hayworth, D
7. \*Jesse P. Wolcott, R
8. \*Alvin M. Bentley, R
9. \*Ruth Thompson, R
10. \*Elford A. Cederberg, R
11. \*Victor A. Knox, R
12. \*John B. Bennett, R
13. Charles C. Diggs, Jr., D
14. \*Louis C. Rabaut, D
15. \*John D. Dingell, D
16. \*John Lesinski, D
17. Martha W. Griffiths, D
18. \*George A. Dondero, R

**MINNESOTA**

1. \*August H. Andresen, R
2. \*Joseph P. O'Hara, R
3. \*Roy W. Wier, D
4. \*Eugene J. McCarthy, D
5. \*Walter H. Judd, R
6. \*Fred Marshall, D
7. \*H. Carl Andersen, R
8. \*John A. Blatnik, D
9. Mrs. Coya Knutson, D

**MISSISSIPPI**

1. \*Thomas G. Abernethy, D
2. \*Jamil L. Whitten, D
3. \*Frank E. Smith, D
4. \*John Bell Williams, D
5. \*Arthur Winstead, D
6. \*William M. Colmer, D

**MISSOURI**

1. \*Frank M. Karsten, D
2. \*Thomas B. Curtis, R
3. \*Leonor K. Sullivan, D
4. George H. Christopher, D
5. \*Richard Bolling, D
6. W. R. Hull, Jr., D
7. \*Dewey Short, R
8. \*A. S. J. Carnahan, D
9. \*Clarence Cannon, D
10. \*Paul C. Jones, D
11. \*Morgan M. Moulder, D

**MONTANA**

1. \*Lee Metcalf, D
2. Orvin Fjare, R

**NEBRASKA**

1. Phil Weaver, R
2. Jackson B. Chase, R
3. \*Robert D. Harrison, R
4. \*A. L. Miller, R

**NEVADA**

At-L. \*Clifton Young, R

**NEW HAMPSHIRE**

1. \*Chester E. Merrow, R
2. Perkins Bass, R

**NEW JERSEY**

1. \*Charles A. Wolverton, R
2. \*T. Millet Hand, R
3. \*James C. Auchincloss, R
4. Frank Thompson, Jr., D
5. \*Peter Frelinghuysen, Jr., R
6. \*Harrison A. Williams, Jr., D
7. \*William B. Widnall, R
8. \*Gordon Canfield, R
9. \*Frank C. Osmer, Jr., R
10. \*Peter W. Rondino, Jr., D
11. \*Hugh J. Addonizio, D
12. \*Robert W. Kean, R
13. \*Alfred D. Sieminski, D
14. T. James Tumulty, D

**NEW MEXICO**

At-L. \*John J. Dempsey, D  
 At-L. \*Antonio M. Fernandez, D

**NEW YORK**

1. \*Stuyvesant Wainwright, 2d, R
2. \*Steven B. Derounian, R
3. \*Frank J. Becker, R
4. \*Henry J. Latham, R
5. \*Albert H. Bosch, R
6. \*Lester Holtzman, D
7. \*James J. Delaney, D
8. Victor L. Anfuso, D
9. \*Eugene J. Keogh, D
10. \*Mrs. Edna F. Kelly, D
11. \*Emanuel Celler, D
12. \*Francis E. Dorn, R
13. \*Abraham J. Multer, D
14. \*John J. Rooney, D
15. \*John H. Ray, R
16. \*Adam C. Powell, Jr., D
17. \*Frederic R. Coudert, Jr., R

18. \*James G. Donovan, D
19. \*Arthur G. Klein, D
20. Irwin D. Davidson, D
21. Herbert Zelenko, D
22. \*Sidney A. Fine, D
23. \*Isidore Dollinger, D
24. \*Charles A. Buckley, D
25. \*Paul A. Fino, R
26. \*Ralph A. Gamble, R
27. \*Ralph W. Gwinn, R
28. \*Katharine St. George, R
29. \*J. Ernest Wharton, R
30. \*Leo W. O'Brien, D
31. \*Dean P. Taylor, R
32. \*Bernard W. (Pat) Kearney, R
33. \*Clarence E. Kilburn, R
34. \*William R. Williams, R
35. \*R. Walter Rielman, R
36. \*John Taber, R
37. \*W. Sterling Cole, R
38. \*Kenne+h B. Keating, R

39. \*Harold C. Ostertag, R
40. \*William E. Miller, R
41. \*Edmund P. Radwan, R
42. \*John R. Pillon, R
43. \*Daniel A. Reed, R

**NORTH CAROLINA**

1. \*Herbert C. Bonner, D
2. \*L. H. Fountain, D
3. \*Graham A. Barden, D
4. \*Harold D. Cooley, D
5. \*Thurmond Chatham, D
6. \*Carl T. Durham, D
7. \*F. Ertel Carlyle, D
8. \*Charles B. Deane, D
9. \*Hugh Q. Alexander, D
10. \*Charles Raper Jonas, R
11. \*Woodrow W. Jones, D
12. \*George A. Shuford, D

**NORTH DAKOTA**

At-L. \*Usher L. Burdick, R  
 At-L. \*Otto Krueger, R

**OHIO**

1. \*Gordon H. Scherer, R
2. \*William E. Hess, R
3. \*Paul F. Schenk, R
4. \*William M. McCulloch, R
5. \*Cliff Clevenger, R
6. \*James G. Polk, D
7. \*Clarence J. Brown, R
8. \*Jackson E. Betts, R
9. Thomas L. Ashley, D
10. \*Thomas A. Jenkins, R
11. \*Oliver P. Bolton, R
12. \*John M. Vorys, R
13. A. D. Baumhart, Jr., R
14. \*William H. Ayers, R
15. John E. Henderson, R
16. \*Frank T. Bow, R
17. \*J. Harry McGregor, R
18. \*Wayne L. Hays, D
19. \*Michael J. Kirwan, D
20. \*Michael A. Feighan, D
21. Charles A. Vanik, D
22. \*Mrs. Frances P. Bolton, R
23. William E. Minshall, R

**OKLAHOMA**

1. \*Page Belcher, R
2. \*Ed Edmondson, D
3. \*Carl Albert, D
4. \*Tom Steed, D
5. \*John Jarman, D
6. \*Victor Wickersham, D

**OREGON**

1. \*Walter Norblad, R
2. \*Sam Coon, R
3. Mrs. Edith Green, D
4. \*Harris Ellsworth, R

**PENNSYLVANIA**

1. \*William A. Barrett, D
2. \*William T. Granahan, D
3. \*James A. Byrne, D
4. \*Earl Chudoff, D
5. \*William J. Green, Jr., D
6. \*Hugh Scott, R
7. \*Benjamin F. James, R
8. \*Karl C. King, R
9. \*Paul B. Dague, R



10. \*Joseph L. Carrigg, R
11. Daniel J. Flood, D
12. \*Ivor D. Fenton, R
13. \*Samuel K. McConnell, Jr., R
14. \*George M. Rhodes, D
15. \*Francis E. Walter, D
16. \*Walter M. Mumba, R
17. \*Alvin R. Bush, R
18. \*Richard M. Simpson, R
19. James M. Quigley, D
20. \*James E. Van Zandt, R
21. \*Augustine B. Kelley, D
22. \*John P. Saylor, R
23. \*Leon H. Gavin, R
24. \*Carroll D. Kearns, R
25. Frank M. Clark, D
26. \*Thomas E. Morgan, D
27. \*James G. Fulton, R
28. \*Herman P. Eberharter, D
29. \*Robert J. Corbett, R
30. \*Vera D. Buchanan, D

## RHODE ISLAND

1. \*Aime J. Forand, D
2. \*John E. Fogarty, D

## SOUTH CAROLINA

1. \*L. Mendel Rivers, D
2. \*John J. Riley, D
3. \*W. J. Bryan Dorn, D
4. \*Robert T. Ashmore, D
5. \*James P. Richards, D
6. \*John L. McMillan, D

## SOUTH DAKOTA

1. \*Harold O. Lovre, R
2. \*E. Y. Berry, R
2. \*Howard H. Baker, R

## TENNESSEE

1. \*B. Carroll Reece, R
3. \*James B. Frazier, Jr., D
4. \*Joe L. Evins, D
5. \*J. Percy Priest, D

6. Roy Bass, D
7. \*Tom Murray, D
8. \*Jere Cooper, D
9. \*Clifford Davis, D

## TEXAS

1. \*Wright Patman, D
2. \*Jack B. Brooks, D
3. \*Brady Gentry, D
4. \*Sam Rayburn, D
5. Bruce Alger, R
6. \*Olin E. Teague, D
7. \*John Dowdy, D
8. \*Albert Thomas, D
9. \*Clark W. Thompson, D
10. \*Homer Thornberry, D
11. \*W. R. Poage, D
12. Jim Wright, D
13. \*Frank Ikard, D
14. John J. Bell, D
15. Joseph M. Kilgore, D
16. J. T. Rutherford, D
17. \*Omar Bureson, D
18. \*Walter Rogers, D
19. \*George H. Mahon, D
20. \*Paul J. Kilday, D
21. \*O. C. Fisher, D
- At-L. \*Martin Dies, D

## UTAH

1. H. A. Dixon, R
2. \*William A. Dawson, R

## VERMONT

- At-L. \*Winston L. Prouty, R

## VIRGINIA

1. \*Edward J. Robeson, Jr., D
2. \*Porter Hardy, Jr., D
3. \*J. Vaughan Gary, D
4. \*Watkins M. Abbitt, D
5. \*William M. Tuck, D
6. \*Richard H. Poff, R
7. \*Burr P. Harrison, D
8. \*Howard W. Smith, D

9. Pat Jennings, D
10. \*Joel T. Broyhill, R

## WASHINGTON

1. \*Thomas M. Pelly, R
2. \*Jack Westland, R
3. \*Russell V. Mack, R
4. \*Hal Homes, R
5. \*Walt Horan, R
6. \*Thor C. Tollefson, R
- At-L. \*Don Magnuson, D

## WEST VIRGINIA

1. \*Robert H. Mollohan, D
2. \*Harley O. Staggers, D
3. \*Cleveland M. Bailey, D
4. M. G. Burnside, D<sup>1</sup>
5. \*Mrs. Elizabeth Kee, D
6. \*Robert C. Byrd, D

## WISCONSIN

1. \*Lawrence H. Smith, R
2. \*Glenn R. Davis, R
3. \*Gardner R. Withrow, R
4. \*Clement J. Zablocki, D
5. Henry S. Reuss, D
6. \*William K. Van Pelt, R
7. \*Melvin R. Laird, R
8. \*John W. Byrnes, R
9. \*Lester R. Johnson, D
10. \*Alvin E. O'Konski, R

## WYOMING

- At-L. E. Keith Thomson, R

## ALASKA

- \*E. L. (Bob) Barlett, D<sup>2</sup>

## HAWAII

- \*Mrs. Elizabeth P. Farrington, R<sup>2</sup>

## PUERTO RICO

- A. Fernós-Isern, Pop. Dem.<sup>3</sup>

<sup>1</sup> Subject to recount. Republican candidate: Will E. Neal. <sup>2</sup> Delegate. Does not have a vote. <sup>3</sup> Resident Commissioner. Does not have a vote.

## GOVERNORS ELECTED IN THE 1954 ELECTIONS

(An asterisk denotes incumbent)

- Alabama: James E. Folsom, D  
 Arizona: Ernest W. McFarland, D  
 Arkansas: Orval E. Faubus, D  
 California: \*Goodwin J. Knight, R  
 Colorado: Edwin C. Johnson, D  
 Connecticut: Abraham A. Ribicoff, D  
 Florida: LeRoy Collins, D  
 Georgia: Marvin Griffin, D  
 Idaho: Robert E. Smylie, R  
 Iowa: Leo A. Hoegh, R  
 Kansas: Fred Hall, R  
 Maine: Edwin S. Muskie, D  
 Maryland: \*Theodore R. McKeldin, R  
 Massachusetts: Christian A. Herter, R  
 Michigan: \*G. Mennen Williams, D  
 Minnesota: Orville L. Freeman, D  
 Nebraska: Victor E. Anderson, R  
 Nevada: \*Charles H. Russell, R  
 New Hampshire: Lane Dwindell, R  
 New Mexico: John F. Simms, Jr., D  
 New York: Averell Harriman, D  
 North Dakota: \*Norman Brunsdale, R  
 Ohio: \*Frank J. Lausche, D  
 Oklahoma: Raymond Gary, D  
 Oregon: \*Paul L. Patterson, R  
 Pennsylvania: George M. Leader, D  
 Rhode Island: \*Dennis J. Roberts, D  
 South Carolina: George B. Timmerman, Jr., D  
 South Dakota: Joseph J. Foss, R  
 Tennessee: \*Frank G. Clement, D  
 Texas: \*Allan Shivers, D  
 Vermont: Joseph B. Johnson, R  
 Wisconsin: \*Walter J. Kohler, R  
 Wyoming: Milward L. Simpson, R

# WORD SECTION

New and Newly Important Words and Meanings  
Troublesome Pronunciations . . . Words Frequently Misspelled  
Words Frequently Confused . . . Forms of Address

*Prepared by*

G. & C. MERRIAM CO., Springfield, Mass.

Publishers of

Webster's New International Dictionary, Second Edition  
Webster's New Collegiate Dictionary

## New and Newly Important Words and Meanings

*Note:* This is a selected list of words, from a wide variety of subject areas, that have become of fairly recent general interest. Many, as *radar*, *colorcast*, and *dynel*, are new in the sense that they were recently introduced into the language. Some, as *omnibus*, *libretto*, and *alligator*, are recently acquired new or extended senses of well-established terms. Others, as *rocket ship*, *snollygoster* and *fission*, are terms that have been in limited use within certain circles for a considerable time but have only recently become generally used and known. It would be out of keeping with the spirit of a list like this and beyond the space available to treat the entries in formal dictionary fashion. In general, only the commonest spellings and the most basic and important of the new senses have been given.

**ABSTRACT:** Characterized by designs in which an artist, using lines or blocks of color rather than pictures of actual objects, attempts to set forth his feelings or ideas.

**ACETATE RAYON:** A rayon fiber made with cellulose acetate.

**ACK-ACK:** An anti-aircraft gun; also, the fire of such a gun.

**ACRONYM:** A word formed from the initial letters or the first and last syllables of the words in a compound (*jato* from *jet assisted take-off*; *motel* from *motorists' hotel*).

**ACTH:** A compound obtained from the pituitary gland, used especially in the treatment of arthritis.

**ACTINOMYCIN:** An antibiotic isolated from certain soil bacteria.

**ADDITIVE:** Any substance which, when added to another product, such as gasoline or a storage battery, is supposed to make it more powerful or longer-lasting.

**AEROEMBOLISM:** An abnormal bodily condition, called also *air bends*, due to the formation of nitrogen bubbles in the blood and spinal fluid brought about by rapid ascent into high altitudes.

**AGITPROP:** Serving as a means for spreading propaganda intended to promote militancy among the common people;—applied originally to pro-Communist activities.

**AIRLIFT:** A supply line operated by aircraft.

**AIRSTRIPE:** A hard-surfaced runway for the take-off and landing of aircraft; also, a portable runway made of steel sheets.

**ALCOMETER:** A device for detecting drunkenness by measuring the amount of alcohol in a sample of exhaled air.

**ALERT:** A signal to warn of danger, as from hostile aircraft; also, the period of time in which the signal is in effect.

**ALLIGATOR:** A flat-bottomed, armored military vehicle for use on land or water.

**ALL-OUT:** Making use of all available power and resources (as, an *all-out effort*).

**AMPLITUDE MODULATION or AM:** A system of radio broadcasting in which the amplitude of the carrier wave is modulated in accordance with the form of the sound or signal wave.

**AMTRAC:** An amphibious tractor, used chiefly as a military vehicle.

**ANGLE:** A special approach or technique for achieving an end, as for writing a news story or promoting an interest.

**ANTIBIOTIC:** A substance produced by a living organism, especially by a bacterium or fungus, that is used to kill or stop the growth of disease germs.

**ANTIHISTAMINE:** An agent used in the prevention or treatment of allergic reactions.

**AQUACADE:** An elaborate water show consisting of exhibitions of swimming, diving, and acrobatics, accompanied by music.

**ARENA THEATER** = THEATRE-IN-THE-ROUND.

**ARTIFICIAL INSEMINATION:** Introduction of semen into the genital tract of a female animal by other than the natural means.

**ASTRODOME:** A transparent dome on the upper surface of an airplane from which the navigator makes celestial observations.

**ATEBRIN:** An antimalarial drug, quinacrine dihydrochloride.

**ATOMIC BOMB, ATOM BOMB, or A-BOMB:** A bomb with violent explosive power that is due to a sudden release of atomic energy.

**ATOMIC COCKTAIL:** A radioactive substance such as sodium iodide, dissolved in water and given as a drink to cancer patients.

**AUDIO:** Pertaining to or used in the transmission or reception of sound in TV.



- AUDIOPHILE:** One who is enthusiastic about sound, especially music from high-fidelity broadcasts or recordings.
- AUDIOVISUAL:** Involving both hearing and seeing (as, *audiovisual* education uses films, slides, phonograph records, and the like, to supplement instruction).
- AUREOMYCIN:** An antibiotic isolated from a soil microorganism.
- AUSTERITY:** A severe or enforced economy characterized by a lack of luxuries (as, postwar *austerity* in Great Britain).
- AUTOMATIC TRANSMISSION:** Automotive transmission in which the gears are shifted automatically.
- AUTOMATION:** The substitution of machines or mechanical devices for human beings in a manufacturing process.
- BABUSHKA:** A triangular kerchief worn over the head and tied under the chin.
- BABY SITTER:** One who is hired, usually for a few hours, to care for children while the parents are absent from the home.
- BALL-POINT PEN:** A fountain pen in which the writing point is a tiny ball that rotates freely against an inking magazine.
- BAMBOO CURTAIN:** The military, political, and propaganda barrier isolating territory controlled by the Chinese Communists.
- BANK:** A place for storing a reserve supply;—occurs in such combinations as *blood bank*, *eye bank*, *bone bank*, *skin bank*.
- BANKROLLER:** One having a sizable bankroll or a ready and ample supply of funds.
- BARBITURATE:** One of a large group of drugs often used as sedatives or antispasmodics.
- BARREL:** To move at a high speed in a straight course;—used especially of vehicles.
- BASIC ENGLISH:** A copyrighted system intended to simplify the learning of English by the use of a vocabulary limited to the 850 most essential words.
- BATHYTHERMOGRAPH:** An instrument for recording the temperature variations of sea or fresh water according to depth.
- BAZOOKA:** A portable rocket-launcher, used chiefly as an antitank weapon.
- BEACHHEAD:** An area on an enemy shore which an advance force occupies and defends.
- BEAM:** A directional radio signal for guiding aircraft, audible as a continuous tone as long as the aircraft stays on course, but as a broken tone if it veers to the left or right.
- BEBOP:** A style of jazz with many notes to the measure, usually played loud and fast and characterized by changing of key and accenting of odd beats.
- BELLYLAND:** To land an airplane on the 'under side of its fuselage without using the landing gear.
- BENTHOSCOPE:** A steel sphere used for deep-sea diving and observation.
- BETATRON:** An apparatus in which electrons are accelerated to high speed and formed into beta rays for use in generating high-voltage X-rays or for nuclear bombardment.
- BIG WHEEL, slang:** An important, impressive person; sometimes one who only feels himself important.
- BIKINI:** A woman's two-piece bathing suit of abbreviated style.
- BINAURAL SOUND:** Sound recorded or transmitted by pairs of equipment in order to give the listener the effect of having heard the original with his own two ears.
- BIOLOGICAL WARFARE:** Warfare in which living organisms, especially disease germs, are used against human, animal, and plant life; also, warfare involving the use of synthetic chemicals against plants.
- BIRD, slang:** An enthusiast (as, a *bird* about music); also, any person thought to be odd or strange.
- BITCH, slang:** To gripe; to complain.
- BLACK MARKET:** Trade in violation of official controls or restrictions, especially those concerning price ceilings, rationing, and priorities; also, a market or group carrying on such trade.
- BLISTER:** A compartment, often covered by a transparent dome, that protrudes from the fuselage of an aircraft and is usually occupied by a gunner or observer.
- BLITZ:** A violent, swift military attack; also, any sudden, overpowering attack;—short for *blitzkrieg*.
- BLOCKBUSTER:** A huge, high-explosive demolition bomb, usually one weighing two, four, or six tons.
- BLOODMOBILE:** An automobile equipped for collecting blood from volunteer donors.
- BLUEPRINT:** A detailed plan for a project or program of action (as, a *blueprint* for mobilization).
- BLUE RIBBON JURY:** A panel of jurors selected for qualifications such as education or property ownership, that may be called to sit in complicated cases.
- BOBBY SOCK:** A girl's sock reaching above the ankle.
- BOBBY SOXER:** A young girl, especially one in the early teens;—from the wearing of bobby socks.
- BOMB:** A small container in which a liquid, as an insecticide, is held under pressure and released as a spray.
- BOOBY TRAP:** An explosive device concealed and attached to some harmless-looking object; also, any trap for the unsuspecting.
- BOOGIE-WOOGIE:** A style of playing blues on the piano, characterized by a persistent bass rhythm and elaborate treatments of a simple melody, often in contrary motion to the bass.
- BOOKBURNING:** Systematic destruction, usually by a government, of books believed to contain dangerous ideas; hence, the suppression of ideas.
- BOOKMOBILE:** A closed autotruck with shelves of books, which serves as a traveling library or bookstore.
- BOOSTER:** A device for strengthening radio or television signals in areas where the reception is weak.
- BOP:** Short for *bebop*; also, one fond of *bebop*.
- BOTTLENECK:** To delay progress; to hold up a process, especially at a critical point.
- BOYS' TOWN:** A farm or school for homeless or delinquent boys, organized like a town and governed by the boys themselves.

**BRAINWASHING:** The forcible replacement of one set of political ideas by another set, especially through indoctrination or mental torture.

**BRASS:** Military and naval officers of high rank or position, especially those in top commands.

**BREAK:** A short rest period, often one set aside from the working day.

**BRIEF:** To give final, last-minute instructions or information (as, to *brief* the crew of a bomber before a mission).

**BROWNOUT:** A dimming of street lights and various other outdoor lighting, chiefly to conserve fuel supplies.

**BRUSHOFF:** A curt or offhand dismissal (as, to give someone the *brushoff*).

**BUDGIE:** Short for *budgerigar*, the zebra parakeet.

**BUILD-UP:** Extremely favorable notice, as by the press or radio, designed to popularize a product, personality, or organization.

**BUILT-IN:** Functioning as a part of, but separately identifiable from, a given unit (as, *built-in* shelves); also, conditioned (as, a *built-in* reaction).

**BULLDOZER:** A tractor-driven machine with a broad, blunt horizontal blade or ram, used especially in road building and clearing land.

**BUMP:** To push (a person) out of his place in order to take it for oneself (as, to *bump* a man from his job).

**BURGER:** A sandwich usually made of a flat roll cut in half and filled either with hamburger or another food specified (as, *pork-burger* or *beefburger*).

**BURP GUN:** A machine pistol.

**BUTADIENE:** A colorless gas, made from petroleum and alcohol, used in the making of synthetic rubber.

**BUY, slang:** To accept; to agree to; to assent (as, to *buy* an idea or an argument).

**BUZZ:** To fly an airplane fast and at a low altitude over (as, to *buzz* an airfield).

**CABANA:** A beach shelter resembling a cabin, usually with an open side facing the sea.

**CADRE:** A nucleus of thoroughly indoctrinated leaders who actively promote the interests of a communist or revolutionary party.

**CAFÉ CURTAINS:** Plain, straight-hanging curtains, usually hung on poles by loops or rings, used to cover the lower part of a window or door.

**CAFÉ SOCIETY:** People who frequent fashionable cafés and night clubs.

**CALYPSO:** A ballad in African rhythm, often a parody or a satire on current events, sung especially by natives of the British West Indies as part of a pre-Lenten carnival.

**CANDID CAMERA:** A camera, usually a small one with a fast lens, used for taking unposed, informal pictures, usually without the subject's knowledge.

**CANNIBALIZE:** To dismantle a machine in order to get parts for use as replacements in other machines.

**CAPSULE:** Of a small type or in a condensed or streamlined form (as, a *capsule* review, criticism, or submarine).

**CAPTIVE AUDIENCE:** An audience obliged to stay within hearing of a speech or broadcast, often being subjected to advertising or propaganda.

**CARD-CARRYING MEMBER:** A Communist to whom a party membership card has been issued and who presumably carries it on his person.

**CARHOP:** A waiter or waitress at a drive-in restaurant who serves food and drinks to customers in their parked cars.

**CARPORT:** A roofed shelter for an automobile, usually attached to another building, and with two or more open sides.

**CARTRIDGE:** A removable pickup in the tone arm of a phonograph.

**CASUAL:** Of clothing, designed in a simple, easy style suitable for informal or sports events.

**CEILING:** A maximum, as for a price, wage, fee, or rent, which is fixed as the upper legal limit by government authority, usually on the basis of the level prevailing at a certain date.

**CERAMAL = CERMET.**

**CERMET:** A strong, heat-resistant metallic alloy.

**CHAIN REACTION:** In chemistry and physics, a process which can continue itself because one of its resulting products is always able to start the process anew until the original material is used up.

**CHALKBOARD:** A smooth flat surface, often of slate or composition, for writing on with chalk.

**CHALKTALK:** A talk or lecture which the speaker illustrates by making drawings or cartoons as he talks.

**CHANNEL:** A narrow band of frequencies on which a radio or television program may be transmitted.

**CHARACTER ASSASSINATION:** The attempt to discredit or destroy the reputation of another person, often by making vague, unproved accusations.

**CHEAP:** Having a depreciated purchasing power or value, especially as the result of a currency inflation (as, *cheap* dollars).

**CHEESECAKE:** Photography or photographs intended to display or accent female charms or attractions; also, any photograph having a considerable amount of sex appeal.

**CHICHI, slang:** Stylish; chic; fashionable; also, affected or esoteric.

**CHLORAMPHENICOL:** An antibiotic effective against certain rickettsiae and viruses.

**CHLORDANE or CHLORDAN:** An odorless liquid insecticide.

**CHORAL SPEAKING:** Interpretive reading or recitation, usually of poetry or rhythmic prose, by a group of voices known as a *speech choir*.

**CHOREOGRAPH:** To compose and arrange a ballet or dance; also, to provide a subject or a piece of music with a ballet or dance.

**CHOROSCRIP:** A system of notation used in teaching and recording dance figures and steps.

**CINCHER:** A wide, snug-fitting ornamental belt for women.

**CLASSIFIED:** Forbidden to be revealed out-



- side authorized circles, for reasons of national security.
- CLOAK-AND-DAGGER:** Of literature, dealing in intrigue and melodramatic action, usually of characters in a colorful historical setting, and involving espionage, duels, or the like.
- CLOBBER, slang:** To beat or pound mercilessly; also, to defeat overwhelmingly.
- CLOSED CIRCUIT:** Television transmission in which the signal is not broadcast but can be received only by interconnected receivers.
- CLOUD CHAMBER:** A closed vessel containing saturated water whose sudden expansion makes visible by a trail of white droplets the passage of an ionized particle.
- CLOUD SEEDING:** The introduction of a substance, as dry ice or silver iodide, into certain types of clouds in order to cause rainfall.
- CLOVERLEAF:** A road plan resembling a four-leaf clover, in which one road passes over another, permitting traffic to merge without left-hand or abrupt turns or direct crossings.
- CLUTCH:** A critical point; a pinch (as, to come through in the *clutch*).
- CLUTCH BAG:** A woman's purse or bag, usually small and without a handle, which is carried in the hand.
- COAXIAL CABLE:** A cable used in the transmission of telegraph, telephone, and television signals, consisting of a tube of conducting material surrounding but insulated from a central conductor.
- COFFEE BREAK:** A rest period during the working day, allowing the employee time for a cup of coffee.
- COLD FRONT:** In meteorology, the forward boundary of a mass of cold air.
- COLD WAR:** A struggle between two nations or groups of nations, waged by use of political and economic strategy, propaganda, and other measures short of armed combat.
- COLD WAVE:** In hairdressing, a permanent wave produced by a chemical solution.
- COLLECTIVE SECURITY:** Security of all the members of an association of nations from aggression by any other nation or nations.
- COLORCAST:** A television broadcast in color.
- COMBO:** A small group of musicians, usually jazz players;—from *combination*.
- COMIC BOOK:** A paper-bound book made up of a series of cartoons or comic strips, sometimes humorous, often telling a story of adventure or crime.
- COMMANDO:** A band or unit of troops specially trained for making surprise raids into enemy territory; also, a member of such a unit.
- COMMERCIAL:** That portion of a sponsored radio or television program devoted to advertising; also, the script prepared for the advertising announcement.
- COMMIE:** A member or agent of the Communist party; also, a fellow traveler.
- COMPATIBLE:** Designating a system in which color television broadcasts may also be received in black and white on receivers not specially equipped for color reception.
- COMPOUND F:** A hormone used in the treatment of arthritis.
- CONDITIONER:** A substance which, when added to soil, improves aeration, workability, and crop yield.
- CONSCRIPT:** To enroll by compulsion for military service.
- CONTACT LENS:** A lens of glass or plastic fitted to the eyeball, worn instead of the usual eyeglass to correct defects of vision.
- CONTAINMENT:** Restraint; specif., the restriction of Communism to fixed territorial limits.
- CONTOUR FARMING:** A system of farming in which plowing and planting follow the contour lines of sloping land, thus retarding erosion from the runoff of rainwater.
- CONVERSATION PIECE:** Any unusual or distinctive article, as of clothing or furniture, which is likely to attract attention and provide a subject for conversation.
- CONVERTER:** A device for adapting a television receiver to receive channels other than those for which it was designed.
- CONVERTIPANE:** An aircraft that takes off and lands like a helicopter but flies like a conventional airplane.
- COOKOUT:** An outing at which a meal is cooked and eaten in the open.
- CORN:** Corny acting or playing.
- CORNY:** Trite, stale; old-fashioned, or countrified; also, of music, played or sung in a bland, unsophisticated style.
- CORONARY THROMBOSIS:** A blood clot (a *thrombus*) occurring in an artery of the heart.
- CORTISONE:** A compound used in treating rheumatoid arthritis and certain allergies.
- COUNTER-INTELLIGENCE:** Organized activities of military intelligence services designed to block enemy sources of information and deceive the enemy by ruses, misinformation, and the like.
- COUNTERWORD:** A word used in popular speech in such a variety of situations that its original, specific meaning is lost and it serves only as a counter or token used in place of a more definite word (examples: *swell, awful, nice*).
- COURTESY CARD:** An identification card which supposedly assures its holder of favors or special treatment, as from the police.
- CRACK UP:** To crash or cause to crash, as an airplane; hence, to break down; collapse; go to pieces.
- CRASHLANDING:** An airplane landing in which the plane is either damaged or destroyed.
- CREDIT LINE:** A line, note, or name published with an article, news story, photograph, or the like, acknowledging the source.
- CREEPING:** Making, or thought to be making, inroads or undesired progress (as, *creeping socialism*).
- CREW CUT:** A short-cropped, bristly haircut for men.
- CURVACEOUS:** Having a feminine figure which is well-proportioned and marked by pronounced curves.
- CUTBACK:** A reduction in a prevailing rate, amount, or number (as, a production *cut-back*).

**CYBERNETICS:** Comparative study of the control system in the human brain and nervous system with that in such mechanical-electrical communication systems as computing machines.

**CYCLOTRON:** An apparatus used for imparting high speeds to electrified particles, used especially to bombard the nuclei of atoms in order to produce transmutations and artificial radioactivity.

**DAISY:** A circular cheese, usually about 12 to 14 inches in diameter and weighing between 18 and 24 pounds.

**DDT:** A colorless, odorless insecticide, used especially against body lice, flies, mosquitoes, and agricultural pests.

**DEAD DUCK:** Anything doomed or past recovery.

**DEADPAN:** A completely expressionless, immobile face.

**DECAMISADO:** A member of the Argentine working class.

**DECONTROL:** To remove control from (as, to decontrol the price of eggs).

**DE-EMPHASIZE:** To diminish in importance; to make less prominent (as, a move to de-emphasize football at a college).

**DEEP-FREEZER:** A cabinet where food may be quick-frozen and stored.

**DEFICIT SPENDING:** Spending in excess of income;—usually applied to a government.

**DEGREE DAY:** A unit that represents one degree of declination from any given point in the mean outdoor temperature for a day, often used in measuring fuel requirements for a building.

**DE-ICER:** Any system or mechanism used to rid or keep free of ice the wings and tail of an aircraft.

**DELTA WING PLANE:** A fast, high-flying airplane, triangular in shape, like the Greek letter delta.

**DELTIOLGY:** The hobby of collecting post cards.

**DENAZIFY:** To rid, (the people or institutions of a Nazified country) of Nazism and its influence.

**DESENSITIZE:** In psychiatry, to free from a neurotic state; to make immune to a morbid emotional domination.

**DETECTAPHONE:** A telephone apparatus equipped with a microphone transmitter, used especially for listening secretly.

**DETERGENT:** A soluble or liquid preparation, often called "soapless soap," that resembles soap in its ability to emulsify oils and hold dirt in suspension.

**DIAL TONE:** A steady hum, audible in a telephone receiver, indicating that the line is free and a number may be dialed.

**DILLY:** Something of superior or remarkable quality; often, something presenting unusual difficulties or complications.

**DIM OUT:** To obscure in dimness, as by restricting illumination to specks or slits of light, lights shaded from above, or blue lights.

**DIRECTIVE:** An order or instruction as to plan or procedure, such as might be issued by a military official, or by a government or business executive.

**DISC JOCKEY or DISK JOCKEY:** One who

conducts and announces a program of musical records, usually with advertising or nonmusical comments interspersed.

**DISCOGRAPHY:** A descriptive, classified catalogue or listing of phonograph records, usually including dates and performers.

**DISCOPHILE:** An enthusiastic collector or student of phonograph records.

**DISPLACED PERSON or DP:** A person driven or deported from his home country during World War II as a prisoner of war, or for forced labor, or because of his race, politics, or religion.

**DOCUMENTARY:** A film that depicts in artistic form a factual and authentic presentation, as of an event or a social or cultural phenomenon.

**DOODLE:** An aimless, somewhat automatic design, sketch, or scribbling made while one's mind is occupied with something else.

**DOSIMETER:** A device for measuring the amount of radioactivity absorbed by the body.

**DOUBLE-DOME:** A highbrow; an intellectual.

**DOUBLE-TAKE:** A delayed reaction to the importance or meaning of something that at first escaped notice;—usually in the phrase, to do a double-take.

**DOUBLE TALK:** Talk or writing that appears to be earnest and meaningful but is actually a mixture of sense, gibberish, and unintelligible verbiage.

**DOUBLE-THINK:** The ability to have in mind at the same time two contradictory beliefs and accept both;—coined by George Orwell in the novel *Nineteen Eighty-Four*.

**DRIVE-IN:** A place of business, as a theater or restaurant, designed to permit patrons to remain in their automobiles while watching a performance or making purchases.

**DRONE:** A pilotless airplane controlled by radio from the ground or another plane; also, a vessel similarly controlled.

**DRUNKOMETER:** A device for detecting and measuring the degree of alcoholic intoxication by analysis of the breath.

**DUB:** To provide (a film) with a new soundtrack; to blend music or sound effects into (a radio or television broadcast).

**DUCK:** An amphibious military vehicle having wheels and a propeller, that can be used as either a truck or a barge.

**DYNEL:** A synthetic textile fiber in staple form; also, the material made from this fiber.

**EARMOLD:** The portion of a hearing aid that fits into the ear.

**ECDYSIAS:** A strip-teaser;—a humorous term coined by H. L. Mencken.

**EGGHEAD:** An intellectual; a highbrow.

**ELDER STATESMAN:** A man who has retired from active public life but continues to act as an unofficial advisor, especially to government officials.

**ELECTRONICS:** The branch of physics that deals with the emission, motion, and effects of electrons.

**ELECTROSHOCK:** A state of shock induced by the passage of an electric current through the brain and useful in the treatment of certain mental disorders.

**EMCEE:** A master of ceremonies;—from *M. C.*



- ENRICH:** To improve (a food) in nutritive value by adding vitamins and minerals to it during processing.
- ESCALATOR CLAUSE:** A clause in a contract providing adjustment to cover such possibilities as increases or decreases in costs of labor, material, or living.
- ESCAPE LITERATURE:** Literature or writing providing mental escape or distraction from routine or reality.
- EXPEDITER:** One whose job it is to ensure an adequate supply of raw materials for fulfilling production contracts and to direct the movement of processed goods to where they are needed or wanted.
- EXPOSURE METER:** An instrument used by photographers for indicating the correct amount of exposure under varying light conditions.
- EXPRESSWAY:** A superhighway.
- FADE:** In radio and television, to change gradually in loudness or distinctness (as, to *fade* a picture or a sound in or out).
- FAIR-TRADE AGREEMENT:** An agreement between the manufacturer and the distributor of a trade-marked article, prescribing a minimum price for its sale.
- FALTBOT:** A collapsible boat similar in size and shape to a kayak.
- FAST BUCK:** Money that can be made readily or quickly, usually with little effort.
- FEATHERBED RULE:** A union rule that requires an employer to hire unneeded workmen or to pay for duplication of jobs; also, one limiting the amount of work that workmen may do in a day.
- FEATHER MERCHANT, *slang*:** One who tries for easy jobs or is thought to be lazy; also, *military slang*, a civilian.
- FEATURETTE:** A short feature; specif., a motion picture of less than the usual length.
- FEEDBACK:** A partial return of the effects or product of a process to its source or to a preceding stage;—used especially of social, psychological, or biological systems.
- FELLOW TRAVELER:** One who sympathizes with and, often, furthers the program or ideals of, a group (originally, the Communist party) without being a member of the group.
- FIFTH COLUMN:** Secret supporters of an enemy engaged in sabotage or other subversive activity within defense lines.
- FINGER PAINTING:** A technique in which splotches of pigments (*finger paints*) are applied to wet paper and spread with the hands or fingers to form a picture or design.
- FISSION:** The splitting of the nucleus of an atom into two nearly equal parts, resulting in a tremendous release of energy.
- FISSIONABLE:** Capable of undergoing fission.
- FIVE PERCENTER:** One who undertakes to aid businessmen in obtaining contracts or doing other business with the government, usually for a fee of five per cent.
- FLAME-OUT:** A sudden blowing-out of the fire of a jet engine, caused by improper functioning of the fuel-supply system.
- FLIPOVER CARTRIDGE:** A phonograph cartridge that has separate needles for playing both microgroove and standard records and that may be turned to bring the proper needle into playing position.
- FLUFF:** To bungle or stumble in delivering one's lines during a performance; also, to miss a cue.
- FLUID DRIVE:** An automotive power coupling between the flywheel of the engine and the transmission gears that operates on a hydraulic turbine principle.
- FLUORIDATION:** Treatment of drinking water with a fluoride to prevent tooth decay.
- FLYING SAUCER:** Any of various unidentified objects, usually described as disc- or saucer-shaped, reportedly seen in the air.
- FOAM RUBBER:** A spongy, fine-textured rubber used especially for cushions, mattresses and the like.
- FOLD:** To discontinue production or business for lack of patronage or because of public neglect (as, the stage play *folded* after only two performances).
- FRAME OF REFERENCE:** The environment of personal knowledge or experience in which an idea is conceived or interpreted.
- FREELoader:** A "sponge"; one who frequently obtains something (as food or drink) that is paid for by someone else.
- FREEWAY:** An express highway that bypasses towns and is largely free of intersections; a superhighway.
- FREEZE:** To fix inflexibly, as by an executive order, at a given level or in the status on a given day (as, to *freeze* a price or a design).
- FREQUENCY MODULATION or FM:** A virtually static-free system of radio broadcasting in which the frequency of the carrier wave is modulated in accordance with the form of the sound or signal wave.
- FRINGE AREA:** An area on the outer edges of one having a greater strength or concentration (as, a *fringe area* for television reception).
- FRINGE BENEFIT:** Any benefit, such as health insurance or sick leave, not included in the basic wage, that workers receive from their employers.
- FROGMAN:** A person equipped for extended periods of underwater swimming, usually for military reconnaissance or underwater demolition.
- FRONT:** A person or group serving as public representative for a pressure group or subversive organization, often unwittingly, while thinking to act in public or patriotic interests.
- FUSED COLLAR:** A collar, especially one on a man's shirt, that has been lined or otherwise treated to retain its shape.
- GADGETEER:** An inventor or maker of gadgets; also, one given to buying or using them.
- GAGSTER:** A writer of gags or jokes, especially for radio and television programs.
- GAMMA GLOBULIN:** A fraction of blood plasma rich in antibodies and used against diseases such as polio and hepatitis.
- GAPA:** A rocket-powered guided missile used against aircraft and against other missiles;—from ground-to-air pilotless aircraft.
- GENOCIDE:** A calculated attempt to destroy systematically a racial, religious, or political

- ical group; also, an effort to destroy the language, religion, or culture of a group.
- GERIATRIC:** Of or pertaining to *geriatrics*, the branch of medicine dealing with old age and its diseases; also, aged (as, the *geriatric* patient).
- GHETTO:** A quarter of a city in which members of a racial group are segregated by social and legal pressure.
- GI:** A person who is serving or has served as an enlisted member of the U. S. armed forces.
- GIMMICK:** A trick; a clever or artful device or scheme.
- GISMO:** A gadget; device; contraption; also, anything without a name.
- GIVEAWAY:** A radio or television show in which members of the audience participate and receive prizes.
- GOBBLEDYGOOK:** Involved or obscure language such as is frequently found in official pronouncements.
- GOLDBRICK, slang:** To shirk or find excuses to evade assigned work.
- GOOFBALL, slang:** A sleeping tablet, especially one of the barbiturates.
- GOOGOL:** In mathematics, the figure 1 followed by 100 zeros.
- GRASSROOTS:** The farming districts of the country; also, the people living in them, thought of as a politico-economic group holding firm and independent views.
- GRAVEYARD SHIFT:** The third of three daily shifts, as in a factory, usually beginning at midnight.
- GREEN THUMB:** A special or unusual ability to make plants grow;—usually in the phrase, to have a *green thumb*.
- GREMLIN:** An impish gnome, whimsically accused by airmen of tampering with motors, instruments, and the like.
- G SUIT:** An inflatable suit worn by aviators during rapid aerial maneuvers to counteract the effects on the body of pressure greater than gravity.
- GUIDED MISSILE:** Any missile whose course may be directed during passage by a built-in target-seeking device or by radio control.
- GUN:** To open the throttle of (an engine) to increase the speed.
- GYROPILOT:** A control mechanism, sometimes called *automatic pilot*, that keeps an airplane in level flight and on a set course.
- HALF-TRACK:** One of the endless chain-tracks used instead of the rear wheels on a certain type of vehicle; also, a tractor or truck with half-tracks and front wheels.
- HARDTOP:** An automobile having most of the characteristics of a convertible, but with a stationary steel top.
- HASSLE:** A mix-up; also, an argument or fight.
- H-BOMB or HYDROGEN BOMB:** An extremely powerful fusion bomb.
- HEDGEHOP:** To fly an airplane so low that it has to "hop" over trees and hedges.
- HELIPORT:** A place for helicopters to land in order to discharge or receive passengers or cargoes.
- HEPCAT:** A musician in a jazz band; also, a devotee of jazz.
- HEX:** A spell or enchantment; a jinx (as, to put the *hex* on someone).
- HIGH FIDELITY or HI-FI:** The reproduction of sound, usually by a radio or phonograph, with a high degree of faithfulness to the original.
- HIT PARADE:** A listing, as of popular songs or books, in order of current public preference.
- HOOD, slang:** A hoodlum; a rowdy.
- HOOPER or HOOPERATING:** An indication, based on the results of telephone polling, of the popularity of a radio or television program.
- HORSE'S TAIL = PONY TAIL, below.**
- HOT:** Radioactive; also, having to do with radioactive material (as, a *hot* laboratory).
- HOT ROD, slang:** An out-of-date automobile with the trimmings stripped off and the engine stepped up to permit high speeds.
- HOWGOZIT CURVE:** A running graph of the progress of an aircraft flight, especially a transoceanic one.
- HUCKSTER:** One whose business is commercial advertising, especially the preparation of clever, effective advertising programs for radio and television broadcasts.
- HYBRID CORN:** A crossbreed of Indian corn developed from selected strains and having the best characteristics of each.
- HYDROPONICS:** The growing of plants, especially vegetables, with their roots in water that contains the essential minerals, instead of in soil.
- HYPERTENSION:** Abnormally high arterial blood pressure; also, the resulting systemic condition.
- INFLUENCE PEDDLER:** One who tries to get special privileges, especially from the government, for his clients; a five-percenter.
- IN-SERVICE:** Taking place or continuing while in service (as, *in-service* training).
- INSTITUTE:** A short program of instruction or conferences for people already at work in a given field (as, a farmers' *institute* or a bankers' *institute*).
- INTERCOM:** A two-way short-distance communication system with microphones and loud-speakers at each end;—short for *intercommunication system*.
- IRON CURTAIN:** A barrier created by such means as censorship and prohibition of free travel to isolate Russian-controlled territory from outside contacts; hence, any similar barrier against communication.
- IRON LUNG:** A tank device for artificial respiration that forces air into and out of the patient's lungs.
- ISOBAR:** One of two atoms or elements having the same atomic weights but different atomic numbers.
- ISRAELI:** Of or relating to the Jewish state of Israel, in Palestine.
- ISSEI:** A Japanese immigrant to the U. S.; legally, an alien.
- JATO UNIT:** An auxiliary means of propulsion in which rocket engines are used to assist the take-off of an airplane;—from *jet* assisted take-off.
- JEEP:** A small, rugged multipurpose motor vehicle; originally one having four-wheel drive.



**JET PROPULSION:** Propulsion of a body by forces resulting from the rearward discharge of a jet (a high-speed stream of fluid) through an orifice. The forces are a reaction to the discharge of the jet, in accordance with the Newtonian law that to every force there is an equal and opposite reaction.

**JIVE:** The slang or jargon used by swing musicians and jitterbugs; also, any similar slang.

**JUKEBOX:** A coin-operated automatic phonograph-record player.

**JUNKIE, slang:** A narcotics user or addict.

**KEYNESIAN:** Of or pertaining to a system of economics (often associated with the New Deal) advocating considerable government participation in the economic affairs of a country.

**KICKBACK:** The return of part of a sum received, as of wages or fees, prompted by a previous confidential agreement or by coercion.

**KINESCOPE:** A form of cathode-ray tube with a screen at one end on which television pictures or oscillographs may be produced;—called also *picture tube*.

**KINESICS:** The study of such body motions as winks and wags as related to communication between people.

**KNOW-HOW:** Technical skill and practical ability; competence in planning or producing something.

**LANDING CRAFT:** Any of numerous naval warcraft designed for putting ashore troops or equipment in beach assaults.

**LATCH ON TO:** To attach oneself; also, to appropriate; to take over.

**LEFTIST:** One who belongs to a radical or revolutionary party; also, one who holds or advocates ultraliberal principles.

**LEPROMIN TEST:** A test for the recognition of immunity to leprosy.

**LIBRETTO:** The plan or scenario for a ballet.

**LIQUIDATE:** To kill secretly; also, to eradicate ruthlessly.

**LOAFER:** A man's or woman's low leather 'step-in shoe, resembling a moccasin but having a flat heel and stiff outsole.

**LOBOTOMY:** A leucotomy; an incision into the frontal lobe of the brain to sever nerve fibers in an attempt to relieve certain mental disorders.

**LOCKER PLANT:** A business establishment having quick-freezing equipment and lockers for storing frozen foods.

**LONGHAIR:** Idealistic; intellectualized; highbrow (as, *longhair* music or *longhair* writing).

**LOYALTY OATH:** A signed statement of loyalty, often one in which the signer affirms loyalty to the U. S. and denies any Communist connections or sympathies.

**LYSENKOISM:** A biological doctrine advanced by T. D. Lysenko, Russian agronomist, in defiance of orthodox genetics.

**MAE WEST:** A yellow life-saving jacket that can be inflated by two cartridges of carbon dioxide, worn especially by airmen in flights over water.

**MEGADEATH:** One million deaths (as, the power of an atomic bomb may be indicated in terms of *megadeaths*).

**MEGATON:** A million tons; also, an explosive force equal to that of a million tons of TNT;—used especially with reference to a hydrogen bomb.

**MERCY KILLING:** Euthanasia; killing, especially in a quick, painless manner, to put the victim out of extreme pain or misery.

**ME-TOO-ISM:** The echoing of another's opinions or attitudes, usually implying an inability or unwillingness to think for oneself.

**MICROFILM:** A strip of film on which a reduced-size photographic record of printed matter may be kept in a small space.

**MICROGROOVE:** A narrow V-shaped groove used on phonograph records intended to play at speeds of 33 1/3 or 45 revolutions per minute.

**MIDDLEBROW:** Middle-class; midway between highbrow and lowbrow.

**MILK BAR:** A place where milk, ice cream, and other dairy products are sold and may be consumed.

**MOBILE:** A delicately balanced type of sculpture, usually having movable parts which can be set in motion by air currents or other means.

**MOLOTOV COCKTAIL:** A crude explosive device, typically, a gasoline-filled bottle capped with an oil-soaked rag that is ignited just as the bottle is thrown at the target.

**MOMISM:** A supposed excessive admiration and sentimentalizing of mothers, thought to permit a possessive mother to deny her offspring emotional independence.

**MONITOR:** To check (a radio or television transmission) for quality or fidelity to band; also, to check (as a broadcast) for military or political significance.

**MONOLITHIC:** Consisting of one large, undifferentiated whole, exhibiting one harmonious pattern throughout (as, a *monolithic* party or culture).

**MONTAGE:** The production of one complete picture by combining several distinct ones, often in such a way that they blend with or into each other.

**MORETIC:** Pertaining to mores or social conventions.

**MOTEL:** A hotel or group of furnished cabins or attached cottages, situated near a highway, offering accommodations to automobile tourists.

**MOTHBALL:** That which has been placed in indefinite, protective storage (as, a *mothball* fleet or airplane).

**MOTORCADE:** A parade or procession of automobiles.

**MOTOR POOL:** A group or fleet of motor vehicles for use as needed by different organizations or individuals.

**MULTIPHASIC:** Having or considered in terms of many aspects or phases (as, a *multi-phasic* approach to a problem).

**MUSCULAR DYSTROPHY:** A hereditary disease in which there is progressive wasting away of the muscles.

**NAPALM:** A thickener used to gel gasoline for incendiary bombs and flame throwers.

**NEEDLE:** To vex or annoy by repeated sharp gibes; also, to goad or prod.

**NEWSCASTER:** One who broadcasts news, as on radio or television; also, a commentator.

**NIACIN:** A member of the B-vitamin group useful in the prevention of pellagra;—called originally *nicotinic acid*.

**NISEI:** A U. S. citizen born of Japanese immigrant parents.

**NONOBJECTIVE:** In art, creating effect through shapes and colors not intended to represent actual objects; abstract.

**NO-SHOW:** A passenger who, after making a reservation on an airplane, does not show up to claim it at flight time and has made no cancellation.

**NUCLEAR:** Having to do with the atomic nucleus (as, *nuclear physics*).

**NURSERY SCHOOL:** A center for children, usually under 5 years of age, providing supervised play and social training for a few hours a day.

**NYLON:** A synthetic material that can be fashioned into tough, strong, elastic threads and used in making brush bristles, hosiery, textile fabrics and the like.

**OCCUPATIONAL THERAPY:** The treatment of disease or injury by giving the patient regulated work that will help his recovery or rehabilitation.

**OMNIBUS:** A book of reprints, usually one containing works of the same type or by a single author.

**OPPOSITE NUMBER:** A person or position in one system corresponding to one in another (as, an ensign is the *opposite number* of a second lieutenant).

**OSCAR:** One of the statuettes awarded annually for highest excellence in motion picture work; hence, any annual award for excellence.

**PACKAGE:** A fully constructed, prearranged program or plan, such as a radio show or tour, usually offered for sale at a flat sum; also, any finished product made ready for immediate use by preassembling all essential elements into a unit.

**PAN:** To move (a camera) in order to follow a moving object or secure a panoramic effect.

**PANIC SWITCH:** The control on the ejector mechanism that throws a jet pilot from his plane in case of emergency.

**PARAPSYCHOLOGY:** A branch of psychology concerned with investigating evidence for telepathy, clairvoyance, and the like, and with experiments in the field of extrasensory perception.

**PARA-RESCUE TEAM:** A team of rescuers who drop by parachute, as to the scene of a plane crash, in order to give immediate aid to anyone in distress.

**PARITY:** The balance between the prices the farmer receives for his products and the prices he has to pay for the things he must buy.

**PARTISAN:** A member of a guerilla band working behind enemy lines and engaged in such activities as sabotage, demolition, and diversionary attacks.

**PARTY DISCIPLINE:** The discipline imposed on its members by a party;—usually applied to the Communist party.

**PARTY LINE:** The policy or course of action

followed by a party, originally specifically by the Communist party.

**PATCH TEST:** A test for determining susceptibility, made by applying to the skin small pads soaked with the allergy-producing substance in question.

**PEDAL PUSHERS:** Women's trousers, usually calf-length, for sports wear.

**PENICILLIN:** An antibacterial substance extracted from green mold, useful in treating infections.

**PERIL POINT:** The lowest rate to which a tariff can be reduced without injuring the industry of the country levying it.

**PHOTOMURAL:** An enlarged photograph, usually several yards long, affixed to a wall as decoration.

**PICTURE TUBE = KINESCOPE.**

**PICTURE WINDOW:** An extra-large window, usually in a living room, framing a desirable outside view.

**PIGGY-BACK PLANE:** A small airplane carried aloft on the "back" of a larger one, from which it is released in mid-air.

**PIPE:** In radio and television, to transmit (a program) by wire or coaxial cable.

**PIZZA:** A large flat tart made of bread dough spread with pieces of tomato, cheese, and shreds of meat, anchovies or the like, flavored with herbs, and baked thoroughly.

**PIZZERIA:** A restaurant or bakery where pizzas are made and sold.

**PLATTER:** A phonograph record.

**PLUNGING NECKLINE:** A very deep V-neckline in women's apparel.

**PLUSH:** Luxurious; over-elegant (as, a *plush* summer resort).

**POLICE STATE:** A totalitarian state having repressive government control of radio, press, culture, and economic and political life.

**POLITIC:** To campaign for political office; also, to seek to further a special end.

**POLLEE:** One who is questioned in or gives answers for a poll.

**POLO SHIRT:** A close-fitting pullover jersey or sport shirt of cotton knitwear, originally patterned after jerseys worn by polo players.

**PONY TAIL:** A hairdo for women, in which the hair is drawn back tightly from the face and up from the neck, and tied.

**POODLE CUT:** A very short, curly hairdo for women, in imitation of a poodle's coat.

**POP:** Short for *popular*;—used especially of music other than classical.

**PORTAL-TO-PORTAL:** Pertaining to the time a workman spends traveling from the portal or gate of company property to his actual place of work and in returning at the end of the work shift.

**PREFAB:** A prefabricated house or structure, construction of which consists merely of assembling and uniting standardized parts.

**PRESSING:** A phonograph record made from a matrix; also, the whole number of such recordings made at a single time.

**PRESSURE GROUP:** A minority group that brings pressure to bear on legislators or public opinion, often by lobbying or use of propaganda, to force legislation or change public policy.



**PRESSURE SUIT:** A suit worn by pilots flying at high altitudes, which inflates automatically when pressure inside the plane is lost.

**PRESSURIZE:** To maintain near-normal atmospheric pressure inside (the sealed cabin of an airplane) during high-level flight.

**PRIVATE EYE:** A private detective.

**PROFILE:** A vivid, concise biographical sketch; also, a concise analysis of any subject.

**PROXIMITY FUZE:** A device for making a projectile explode near the target.

**PSYCHODRAMA:** A spontaneous drama in which the actors exhibit their natural psychological reactions to a given situation, used especially in treating the mentally ill.

**PSYCHOMETRICS:** A branch of psychology that deals with the use and application of mental measurement; also, the technique of such measurement.

**PSYCHOSOMATIC:** Of or pertaining to the influence of mental factors on bodily disorders.

**PUBLIC RELATIONS:** The activities of a corporation, government, or other organization in building and maintaining good relations with the general public or with special groups.

**PUNCH CARD:** A data card with punched holes in particular places, each having an assigned significance, used in certain automatic business machines.

**PURGE:** To rid (a state or party) of members suspected of disloyalty.

**PUSHOVER:** An opponent easily defeated or a victim incapable of effective resistance; also, any problem presenting no real difficulties.

**QUARTERBACK:** To direct; to make plans and give instructions for carrying them out.

**QUICK-FREEZE:** To freeze (food) so rapidly that the natural juices and flavor are preserved.

**QUICKIE:** Anything hastily prepared or made; anything done without much preparation.

**RABBIT EARS:** A small indoor television antenna composed of two rods projecting upward from a ball-base in the form of a V.

**RACISM:** The assumption that certain races are naturally superior to others; also, any doctrine or program based on such an assumption.

**RADAR:** A powerful radio detecting device capable of establishing the distance, altitude, and direction of motion of any object in the path of its beam.

**RADIANT HEATING:** The heating of a house or room by heat radiated from large surfaces, such as floors, walls, or baseboards, that have first been warmed by heating coils or hot-air ducts.

**RADIATION SICKNESS:** An illness that results from exposure to radiation, as in radiotherapy or an atom bomb explosion.

**RANCH HOUSE:** A one-story dwelling, usually with an informal interior plan and a low-pitched roof.

**REACTOR:** An arrangement of fissionable material designed for the production and control of a chain reaction;—called also *nuclear reactor* and *pile*.

**RECESSION:** A slowing down of commercial and industrial activity, less severe than a depression; also, a period of such slackening.

**RECONVERSION:** The process of converting (especially a war plant) back to the production of civilian goods.

**RED-BAITER:** One who baits, attacks, or harasses communists or radicals.

**REFRESHER:** Providing reinstruction after a period of inactivity or instruction designed to keep one abreast of new developments in a field (as, a *refresher* course in auto mechanics).

**RESISTANCE:** An organized underground movement in a conquered country made up of groups of fighters engaged in sabotage and secret operations against occupation forces;—often with *the*.

**REV:** To raise or lower the number of revolutions per minute;—originally, of an airplane motor.

**Rh FACTOR:** A factor present in the red blood cells of 85 per cent of white persons (Rh-positive) and absent in 15 per cent (Rh-negative), so called because discovered in the blood of *Rhesus* monkeys. Rh incompatibility is manifested by red cell destruction and occurs when the two types are mixed in one person, especially as in the infant of an Rh-positive father and Rh-negative mother.

**RHUBARB:** A heated argument or dispute, often one that takes place on the field during a baseball game.

**RIBOFLAVIN:** Vitamin B<sub>2</sub>, the growth-promoting substance of the vitamin-B group.

**RIGHTIST:** In politics, a member of the right; a conservative or royalist.

**ROBOT BOMB:** A small, pilotless jet-propelled airplane, steered by a gyroscopic device and loaded with explosives, that falls as an aerial bomb when its fuel supply is gone.

**ROC:** An aerial bomb with a television apparatus that transmits information back to the bombardier, who may then correct his initial aim by remote radio control.

**ROCKET SHIP:** An aircraft propelled by rocket power.

**ROLLER DERBY:** A form of sport in which teams on roller skates race around a track.

**ROTATION:** The military system of exchanging individuals or units assigned to combat or arduous duties with personnel more comfortably situated.

**RUMPUS ROOM:** A room in a home, often in the basement, set apart and suitably furnished for games and recreation.

**RUPTURED DUCK:** The symbol of an eagle with wings outspread depicted in the discharge emblem for personnel of the U. S. armed services.

**RUSSIAN ROULETTE:** A game or act of bravado in which the "player" puts one cartridge into a revolver, aims it at himself, spins the cylinder, and pulls the trigger.

**SATELLITE:** A state or country politically

- and economically dominated by a more powerful neighboring one.
- SCAN:** In radar, to cause (a certain area) to be traversed by a directive beam.
- SCARE BUYING:** Sudden buying, often involving an overstocking, of certain goods because of the fear that they may become scarce or unobtainable.
- SCHMOE or SCHMO, slang:** A stupid person; a misfit; a jerk.
- SCIENCE FICTION:** Imaginative or fantastic fiction, dealing especially with such subjects as life in the future, interplanetary travel, and life on other planets.
- SCRATCH TEST:** A test for determining susceptibility, made by rubbing an extract of the allergy-producing substance into the skin.
- SCREEN:** To pass through a standardized test for sorting out candidates according to abilities or eliminating the unfit; hence, to examine or select methodically.
- SCREWBALL:** Someone whose ideas or actions are crazy or fantastic; also, anything ridiculously absurd or zany.
- SCRIPTER:** A writer of scripts, as for movies, radio, or television.
- SEND:** In swing music, to perform with or inspire to spontaneous improvisations; also, to play so as to elate a listener.
- SHAKEOUT:** A moderate slowing down of commercial and industrial activity with a decrease in prices and employment, usually regarded as a readjustment toward normal after a period of inflation.
- SHARP, slang:** Conspicuously attractive; in keeping with the latest styles, as of clothing or speech.
- SHOCK THERAPY:** Treatment of mental disorders by means of a coma induced artificially by the administration of drugs or electric shock.
- SHOOTING WAR:** Conflict involving actual participation of armed forces in combat, as opposed to a war of nerves or a propaganda war.
- SHOPPING CENTER:** A group of retail stores or other business places, sometimes in one building, and usually provided with a large parking lot.
- SIGNATURE:** A tune or sound effect used to identify a particular radio program or feature;—called also *theme*.
- SILK SCREEN PROCESS:** A stencil method in which a design is made on a fine-mesh silk screen and transferred to another surface by forcing pigment through the screen with a squeegee.
- SIMULCAST:** A simultaneous broadcast of a program by radio and television; also, a program thus broadcast.
- \$64 QUESTION:** The most baffling question in a given situation, often one that defies direct answer.
- SKIP-STOP:** Not stopping at all points (as, *skip-stop* elevator or subway service).
- SKYSWEEPER:** A radar-aimed anti-aircraft weapon.
- SKYTYPING:** A technique, similar to skywriting, in which seven equally spaced aircraft emit puffs of smoke to form the letters of a message.
- SLICK or SLICK PAPER:** A large-circulation magazine printed on glossy paper;—usually implies slightness of content and technical smoothness.
- SMAZE:** A combination of smoke and haze.
- SMEAR:** To defame or blacken the reputation of a person or group by name-calling or by maliciously spreading exaggerated charges or rumors.
- SMEAR CAMPAIGN:** A concentrated program of vilification and smearing.
- SNACK BAR:** A counter or bar at which light refreshments and lunches are sold or served.
- SNEAK PREVIEW:** An unannounced showing of a new motion picture, usually to determine audience reaction to it.
- SNOLLYGOSTER:** A rascal or an unscrupulous person, especially an unprincipled politician.
- SNOW:** Small, moving, bright or dark spots on a television screen, resulting from the same causes as static in radio.
- SOAP OPERA:** A daytime radio or television serial drama performed on a commercial program chiefly for housewives.
- SOCIALIZED MEDICINE:** Administration by a government or other organized group of medical and hospital services for all members of a class or all members of the population.
- SONAR:** An apparatus that detects the presence and location of submarines or other underwater objects;—from sound navigation and ranging.
- SOUFFLÉ:** Tiny multicolored beads of glass or metal, used for embroidery.
- SOUND CONDITIONING:** The control of sound, as in an auditorium, by eliminating unwanted noise and excessive reverberations.
- SOUP UP:** To step up the horsepower of a motor, as on an airplane or a jalopy.
- SPACE:** Popularly, the region beyond the earth's atmosphere, lying between and beyond the planets and the stars.
- SPACE MEDICINE:** A suggested branch of medicine which would try to study conditions of outer space and their effect on the human body.
- SPACESHIP:** An imaginary aircraft for interplanetary travel.
- SPEECH CLINIC:** A clinic for the diagnosis and correction of speech disorders.
- SPELUNKER:** One whose hobby is exploring and studying caves and underground phenomena.
- SPIV, slang:** One who contrives to make a living without working; a slacker.
- SPLINTER GROUP:** In politics, a group broken away from a larger, original organization.
- SPLIT-LEVEL HOUSE:** A house built on different levels, usually with the floor level of a single-story section about midway between the floor levels of an adjoining two-story section.
- SPOTTER:** A civilian who watches the sky to report and identify approaching aircraft.
- STATELESS:** Without a state or nationality, as a person who was a citizen of a country no longer in existence.
- STATESIDE:** Of, pertaining to, characteristic of, or coming from the continental U. S.



(as, a transfer from Alaska to *stateside* duty).

**STATIONARY FRONT:** In meteorology, a boundary between two air masses which show little or no movement.

**STATION BREAK:** In radio and television, the pause in a program or between programs to permit stations to identify themselves.

**STATION WAGON:** A sedanlike automobile having a tail gate and back seats that can be removed or folded so the vehicle can be used for light trucking.

**STATISM:** Government control or direction of important aspects of the economic life of a citizen.

**STEREOPHONIC:** Of reproduced sound, giving the effect of coming from two or more directions.

**STOCK CAR RACING:** Automobile racing in which ordinary cars are used rather than specially constructed racers.

**STOCKPILE:** A reserve supply of any essential material accumulated and stored as a safeguard against a shortage.

**STORM COAT:** A tailored winter coat for men or women, usually having a heavy lining and a mouton collar, and often made of gabardine.

**STRAWHAT CIRCUIT:** A summer theater circuit, often including the more popular resort areas.

**STREPTOMYCIN:** A substance extracted from certain soil bacteria and used against the bacteria of certain diseases, as typhoid fever, tularemia, and tuberculosis.

**SULFA:** Of or belonging to a class of drugs that are related to sulfanilamide and have a destructive action against certain types of bacteria.

**SUPERHIGHWAY:** A highway consisting of four or more lanes, designed for fast-moving traffic.

**SUPERMARKET:** A large, departmentalized retail store, usually self-service, selling foods and other household merchandise.

**SUPERSONIC:** Designating a speed greater than that of sound (about 738 miles per hour); also, moving or capable of moving at such speed (as, a *supersonic* aircraft).

**SWING SHIFT:** The work shift between the day and night shifts in a factory operating on a 24-hour basis, usually from 4 p.m. to midnight.

**SYNC:** In motion pictures and television, short for *synchronize* or *synchronization*.

**TAKE-HOME PAY:** The remainder of a person's gross wages after deductions, as for income-tax withholding, retirement, and union dues, have been made.

**TAPE:** A magnetized ribbon on which sounds may be recorded.—To record (sounds) on such a ribbon.

**TELECAMERA:** A television camera.

**TELECAST:** A program broadcast by television.—To broadcast by television.

**THEATER-IN-THE-ROUND:** A theater so arranged that the action area is in the center and the audience is seated on all sides of it;—called also *arena theater*.

**THERMONUCLEAR:** Pertaining to the heat energy resulting from or connected with changes in the nuclei of atoms.

**THIAMINE:** A vitamin, also known as *vitamin B<sub>1</sub>*, that prevents beriberi and certain kinds of neuritis.

**THOUGHT CONTROL:** Repressive control or domination of individual ideas and thinking by another person or group.

**THREE-DIMENSIONAL or 3-D:** Giving the illusion of depth or varying distances;—applied to pictures, especially stereoscopic motion pictures.

**TONE ARM:** The movable part of a phonograph that contains the sound box or pickup and permits the needle to follow the grooves in the record.

**TOP-DRAWER:** Of the highest or first order of rank, excellence or importance.

**TRACE ELEMENT:** A chemical element, usually a metal, essential in minute amounts to the welfare of a plant or animal.

**TRACKMOBILE:** A lightweight tractor used for moving railroad cars in a switchyard.

**TRANSISTOR:** An electronic device similar in use to the electron tube.

**TWEEDY:** Given to or fond of wearing tweeds;—usually implying a certain matter-of-factness, robustness or informality of manner.

**TWEETER:** A small loudspeaker that responds only to high sound frequencies and is used to reproduce sounds of high pitch.

**2,4-D:** A white crystalline compound used as a weed killer.

**ULTRAHIGH FREQUENCY or U.H.F.:** In radio and television, any frequency in the range from 300 to 3000 megacycles.

**VEEP:** A vice-president.

**VERY HIGH FREQUENCY or V.H.F.:** In radio and television, any frequency in the range from 30 to 300 megacycles.

**VIDEO:** *Television*. Pertaining to or used in sending or receiving the image (as, *video frequency*). Contrasted with *audio*.

**VIDEOCAST:** A television broadcast.

**VIP:** A very important person; sometimes, one using an assumed name for security reasons.

**WALKIE-LOOKIE:** A portable, battery-operated television camera.

**WALKIE-TALKIE:** A compact, battery-operated transmitting and receiving radiotelephone that is carried like a knapsack and especially adapted for communication in the field.

**WATER SKIS:** Wide skis towed by a fast motorboat and ridden like a surfboard.

**WEEDICIDE:** Any weed killer, especially a chemical one, as 2,4-D.

**WELFARE STATE:** A state that, by its concern with public health, insurance against sickness and unemployment, and similar measures, assumes a large share of responsibility for the welfare of its citizens.

**WETBACK:** A person who enters the U. S. illegally from Mexico by wading or swimming the Rio Grande River.

**WHAMMY:** A curse or jinx (as, to put the *whammy* on a person).

**WITCH-HUNT:** A searching out of victims, especially liberals, professedly to expose them as disloyal or subversive, but actually to harass them for political reasons.

**WOOFER:** A loudspeaker, larger than a tweeter, that responds only to lower sound frequencies.

**WORKSHOP:** A course or seminar emphasizing free discussion, exchange of ideas and practical application of skills and principles, chiefly for people already working in the field.

**WOW:** A distortion in reproduced sound consisting of a slow rise and fall in pitch due to variations of speed in the sound-reproducing system.

**ZOOT SUIT:** A flashy suit of extreme cut, usually having a long jacket with broad shoulders, and high-waisted peg-top trousers.

## Troublesome Pronunciations

These transcriptions indicate, as closely as possible in a system lacking symbols with clearly defined values, the pronunciations that we believe to be now most widely used in everyday speech in the United States. We do not imply that any pronunciation not shown here is unacceptable.

A syllable printed in capitals has heavy stress, a syllable printed in italics has light stress (stress intermediate between heavy and none at all). Example AL-ba-kurr-kee (Albuquerque). The symbol ÷ preceding a few pronunciations means "widespread but its acceptability is contested by many."

abdomen: AB-dum-un, ab-DOME-un  
absent: (verb) ab-SENT  
absolve: ab-SOLV, ab-ZOLV  
absorb: ab-SORB, ab-ZORB  
abusive: a-BEW-siv, a-BEW-ziv  
accessory: ak-SESS-r-ee  
acclimate: a-KLY-mut, ACK-lum-ate  
accurate: ACK-yer-ut  
acorn: EIGH-korn, EIGH-kern  
acoustic: a-KOOHS-tlk  
acumen: a-KEW-mun  
addict: (noun) ADD-ikt  
address: (noun) a-DRESS, ADD-ress  
Adenauer, Konrad: AHD-n-our  
adhesive: ad-HEE-siv, ad-HEE-ziv  
adobe: a-DOUGH-bee  
Adonis: a-DONN-us, a-DOUGH-nus  
adult: a-DULT, ADD-ult  
advertisement: add-ver-TYZE-munt, ad-VURT-uz-munt  
aerial: (antenna) AIR-ee-ul  
aero: AIR-o or EIGH-er-o (not AIR-ee-o)  
aggrandizement: agg-run-DYZE-munt, a-GRAN-dyze-munt, a-GRAN-diz-munt  
agile: ADG-ul, ADG-yle  
ague: EIGH-gew  
algrette: elgh-GRETT, EIGH-grett  
albino: al-BYE-no  
Albuquerque: AL-ba-kurr-kee  
Algonquin: al-GONN-kwun  
allas: EIGH-lee-us  
alibi: AL-a-bye  
ally: (noun) AL-eye, a-LYE  
alma mater: AL-ma MAHT-r, AHL-  
almond: AHM-und, AL-mund, AMM-und  
altercation: awl-ter-KAYSH-n  
alternate: (noun, adj.) AWL-ter-nut; (verb) AWL-ter-nate  
altimeter: al-TIMM-at-er, AL-tum-eet-er  
alumnae: a-LUMM-nee  
alumni: a-LUMM-nigh  
amateur: AMM-a-turr, AMM-a-toor, AMM-a-cher  
amen: AH-MENN, when not sung also EIGH-MENN  
amenable: a-MENN-ub-l, a-MEEN-ub-l  
amenity: a-MENN-ut-ee  
amortization: amm-er-tuz-AYSH-n, a-mort-uz-AYSH-n  
amortize: AMM-er-tyze, a-MOR-tyze  
amphitheater: AMM-ia-THEE-ut-r  
anchovy: ANN-choa-vee, ann-CHOA-vee  
anemone: a-NEMM-un-ee

angina pectoris: ann-JINE-a PEKT-r-us, ANN-ja-na  
Ankara: ANK-r-uh  
Antarctic: ant-AHRK-tlk, ÷ ant-AHRT-ik  
antepenult: ANT-ee-PEE-nullt  
anti: ANT-ee, ANN-tigh  
antipodes: ann-TIP-ud-eeze  
apothecists: a-poth-ee-OH-sus, app-a-THEE-us-us  
Appalachian: app-a-LATCH-n, app-a-LAYCH-n  
apparatus: app-a-RATE-us, app-a-RATT-us  
applicable: APP-lik-ub-l, a-PLICK-ub-l  
apposite: APP-uz-ut  
appreciate: a-PREE-shee-ate  
apricot: APE-ra-kott, APP-rik-ut  
aqua: ACK-wa  
aquatic: a-KWATT-ik, a-KWOTT-ik  
Arab: AIR-ub; in "wild Arab," "young Arab," EIGH-rabb  
arbitrator: AHR-but-er  
arbutus: ahr-BUTE-us  
arch: followed by an English word: AHRTCH (but *archangel* is AHRK-aynge-l)  
archi: AHRK-a or AHRK-ee (but *archipelago* is either ahrk-a-PELL-a-go or ahrch-a-PELL-a-go)  
archivist: AHRK-a-vust, AHRK-eye-vust  
arctic: AHRK-tlk, ÷ AHRT-ik  
argot: AHR-gut, AHR-go  
argyle: AHR-guile  
aria: AHR-ee-a, AIR-ee-a  
-arily: the -ar- usually has heavier stress than any preceding syllable—for example, pry-MEHR-ra-lee (*primarily*), temp-r-EHR-ra-lee (*temporarily*)  
aristocratic: a-risst-a-KRATT-ik  
Arkansas: (state) AHRK-n-saw; (river) the same or ahr-KANZ-us  
armistice: AHRM-us-tus  
artisan: AHRT-uz-n  
Aryan: AIR-ee-un, AHR-ee-un  
Asia: EIGH-zha  
Asiatic: eigh-zhee-ATT-ik  
asparagus: not -grus or -grass  
aspirant: us-PYRE-unt, ASP-r-unt  
asthma: AZZ-ma  
athlete: not ATH-a-leet  
atoll: ATT-tahl, a-TAHL  
attaché: att-a-SHAY  
Audubon: AWD-ub-n, AWD-ub-ahn  
au gratin: oh (or aw) GRAT-t-n, GRAHT-n  
auld lang syne: AWLD (or OHLD) lang SIGN (or ZIGN)



Auriol, Vincent: awr-YAWL  
 aurora borealis: aw-RORE-a (or a-RORE-a)  
   bore-ee-AL-us (or bore-ee-ALL-us)  
 auspices: -suz not -seez  
 automobile: AUGHT-a-moe-BEEL, AUGHT-a-  
   moe-beel, *ought-a-MOE-beel*  
 auxiliary: awg-ZILL-yer-ee, ÷ -ZILL-r-ee  
 aviation: ave-ee-AYSH-n, avv-ee-  
   avocado: avv-a-KAHD-o  
 avoirdupois: AVV-er-da-POIZ  
 aye: ("yes") EYE  
 azure: AZH-r

Bacardi: ba-KAHRD-ee  
 bacilli: ba-SILL-eye  
 bade: badd, bayed  
 badinage: BADD-n-ahzh  
 bakelite: BAKE-light, BAKE-a-light  
 ballet: BAL-eigh, bal-EIGH  
 banal: ba-NAL, ba-NAHL, BANE-1  
 Bao Dai: BOW DYE (BOW rhymes with COW)  
 barbiturate: bahrb-a-TOOR-ate, bahr-BITCH-  
   r-ate  
 bases: pl. of base, BAY-suz; pl. of basis, BAY-  
   seez

bas relief: BAH-ree-LEEF, BASS-ree-LEEF  
 batik: ba-TEEK  
 baton: ba-TAHNN  
 Baton Rouge: BATT-n ROOZH  
 bauxite: BAWKS-ite, BOAZ-ite  
 bayou: BUY-oo  
 Beau Brummel: BO BRUMM-1  
 bedizen: ba-DIZE-n, -DIZZ-n  
 behemoth: bee-HEE-muth, BEE-a-mahth  
 beige: bayzh  
 bellows: BELL-oez, BELL-us  
 beneficiary: benn-a-FISH-r-ee, benn-a-FISH-  
   ee-ehr-ee

Ben-Gurion, David: BENN-goor-YOAN  
 benzedrine: BENN-za-dreen, ben-ZEDD-run  
 bequeath: rhymes with either *wreath* or  
   *wreath*  
 berserk: bur-SURK, bur-ZURK, BURR-surk  
 bestial: BESS-chul  
 Bethlehem: BETH-lee-um, BETH-la-hemm  
 betroth: o as in *cloth* or *clothe*; th as in *lath*  
   or *lathe*

Bevan, Aneurin: un-EYE-run BEVV-un  
 bicycle: BUY-sick-1 (see *motorcycle*, *tricycle*)  
 bifurcate: BUY-fer-kate, buy-FUR-kate  
 Bijou: BEE-zho  
 bikini: ba-KEE-nee, BICK-a-nee  
 billet-doux: BILL-eigh-DOO  
 biography: buy-OGG-ra-fee  
 bison: BIZE-n, BICE-n

bituminous: ba-TOO-ma-nus, buy-  
 blackguard: BLAGG-ahrd, BLAGG-rd  
 blancmange: bla-MAHNDJ  
 blasé: BLAH-ZAY  
 blatant: BLATE-nt  
 blouse: rhymes with *louse* or *Howe's*  
 boatswain: BOCE-n  
 Boccaccio: bo-KAHTCH-ee-owe  
 Bohème, La: LAH boh-EMM, -AIM  
 Boise: (Ida.) BOYCE-ee, BOIZE-ee  
 Bologna: (city) ba-LONE-ya; (sausage) ba-  
   LONE-ee, ba-LONE-a  
 bona fide: BONE-a (or BONN-a) figh-dee (or  
   ÷ fighd)

Bonneville: BONN-a-vill  
 boudoir: BOOD-wahr  
 bouillon: BOOL-yonn, BOOL-yun, BOO-yonn

boulevard: BULL-a-vahrd, BOO-la-vahrd  
 bouquet: bowe-KAY, boo-  
 Bourbon: (family) BOOR-bun, (whisky)  
   BURR-bun  
 bourgeois: BOOR-zhwah  
 boutonniers: BOOT-n-EAR  
 bowie knife: BOO-ee, BOWE-ee  
 Brahma: (cattle) BRAY-ma, BRAH-ma  
 Brahman: (caste) BRAH-mun  
 brassard: bra-SAHRD, BRASS-ahrd  
 trassiere: bra-ZEER, BRASS-ee-AIR  
 bravo: (shout) BRAH-voe  
 breeches: BRITCH-uz (but BREATCH-uz in  
   *breeches buoy*)  
 bronchial: BRONK-ee-ul (not BRONN-ik-ul)  
 Brontë: BRONT-ee  
 brooch: broach, brewch  
 brougham: BRUE-um, BROE-um  
 brusque: brussk, broosk  
 Bucharest: BOO-ka-rest  
 Buenos Aires: BWAY-nus (or BOH-nus) AIR-  
   eez (or EYE-reez)  
 buffet: (slap) BUFF-ut; (sideboard) buff-  
   EIGH, boof-EIGH  
 buoy: boi, BOO-ee  
 buoyant: BOY-unt, BOO-yunt  
 bureaucracy: bew-ROCK-ra-see  
 business: BIZZ-nus  
 butte: bewt  
 Byelo-Russia: bee-ELL-oe-RUSH-a  
 Byzantine: BIZZ-n-teen, -tyne; bizz-ANN-  
   teen, -tyne

cabana: ka-BANN-a  
 cadaver: ka-DAVV-r  
 cadre: (military) KADD-ree  
 Caesarea: SEEZ-r-EE-a, SESS-r-EE-a  
 caffeine: KAFF-EEN, KAFF-ee-in  
 Cairo: (U. S. places) CARE-oh or KAY-roh;  
   (Egypt) KYE-ro  
 caisson: CAY-sonn, CASE-n  
 Calais: (France) CAL-ay, cal-AY  
 caliph: CAY-lif, CAL-if  
 calliope: (instrument) ca-LYE-a-pee, ÷ CAL-  
   ee-oap  
 calyx, calyces: CAY-licks, CAY-la-seez  
 camellia: ca-MEAL-ya  
 Camembert: CAMM-um-bair  
 camouflage: CAMM-a-flahzh, -flahdj  
 canapé: CANN-a-pee  
 candelabra: can-da-LABE-ra, -LAHB-ra  
 canine: CAY-nyne  
 cantaloupe: CANNT-l-oap  
 cantilever: CANNT-l-eve-r, -evv-r  
 cantonment: cun-TONN-munt, cun-TONE-  
   munt  
 caoutchouc: COW-chook, COO-chook  
 capricious: ca-PRISH-us, ca-PREESH-us  
 capsule: CAPP-soole, CAPPS-1  
 Caracas: ca-RACK-us, ca-RAHK-us  
 caramel: CAIR-um-1, ÷ CAHRM-1  
 carbine: CARB-eyne, CARB-een  
 carburetor: CARB-a-rate-r, CARB-ya-  
 Caribbean: cair-ub-EE-un, ca-RIBB-ee-un  
 caricature: CAIR-a-ca-choor, -ca-cher  
 carillon: CAIR-ul-onn  
 carmine: CARM-un, CARM-eyne  
 carnauba: (wax) kar-NAW-ba, kar-na-OO-ba,  
   kar-NOW-ba, kar-NOO-ba  
 Carnegie: CAHRN-a-gee, ker-NEGG-ee, cahr-  
   NEGG-ee  
 carrousel: CAIR-a-sell, -zell

- cashew: CASH-oo, ca-SHOO  
 catastrophe: ca-TASS-tra-fee  
 catastrophic: cat-a-STRAHF-ik  
 catch(er): KATCH(-r), KETCH(-r)  
 catchup: KETCH-up, KATCH-up, KATS-up  
 cater-cornered: CATT-r-CORN-rd, CATT-a-,  
 CATT-ee-  
 catsup: KETCH-up, KATCH-up, KATS-up  
 Caucasian: caw-CAYZH-n, -CAZH-n  
 cay: (West Indian island) kee  
 Cayenne pepper: KYE-enn, KAY-enn  
 cayuse: KYE-yooss, kye-YOOSS  
 Cecil: SEECE-l; less often in U. S., usually  
 in England, SESS-l  
 cello: CHELL-oh  
 Celt: selt, kelt  
 cement: sim-ENT  
 centenary: SENT-n-ehr-ee, sen-TEN-r-ee  
 centimeter: SENT-a-meet-r, SAHNT-a-  
 cerebrial: sa-REEB-rul, SEHR-a-brul  
 cerements: SEER-munts, SEHR-a-munts  
 chaise longue: SHAZE LONG, ÷ SHAZE LOUNJ  
 chamols: SHAMM-ee  
 Chantilly: (lace) shan-TILL-ee  
 chaparral: SHAP-r-AL  
 chargé d'affaires: SHAHR-zhay-da-FAIR  
 charivari: (noisemaking) shiv-r-EE, SHIV-r-ee  
 chartreuse: shar-TROOS, -TROOZ  
 chassis: SHASS-ee, CHASS-ee  
 chastisement: chas-TIZE-munt, CHAS-tiz-  
 munt  
 chasuble: CHASS-ab-l, CHAZZ-  
 chauffeur: SHOAF-r, shoaf-URR  
 chenille: sha-NEEL  
 Chiang Kai-shek: jee-AHNG KYE-SHEKK  
 Chicago: sha-KAHG-o, sha-KAWG-o  
 chicanery: shi-KANE-r-ee  
 chiffon: shif-ONN, SHIFF-onn  
 chignon: SHEEN-yonn  
 chimerical: kye-MEHR-uk-l, kye-MEAR-, ka-  
 chimpanzee: chim-pan-ZEE, shim-; chim-PAN-  
 zee, shim-  
 chiropodist: kuh-ROPP-ud-ist, ÷ shuh-  
 chivalric: shiv-AL-rik, SHIVV-ul-rik  
 choleric: kuh-LEHR-ik, KOLL-er-ik  
 Chopin: SHOW-pan  
 Chou En-Lai: DZUH ENN-LYE  
 chou paste: shoo  
 cicatrix: SICK-a-tricks, si-KAY-tricks  
 cicerone: cheech-r-OAN-ee, siss-r-  
 elgarette: SIG-r-ETT, -ett  
 clandestine: clan-DEST-n, CLAN-dus-tyne  
 clangor: CLANG-r, CLANG-ger  
 claspboard: CLABB-oard, -urd  
 Cleopatra: klee-a-PAT-ra, -PAY-tra, -PAH-tra  
 clientele: KLY-un-TELL  
 elliche: cleek, click  
 eloche: cloash  
 eloture: CLOACH-r  
 eoadjutor: coh-a-JOOT-r  
 coax: (persuade) cokes; (coaxial cable) coh-  
 AKS, COH-aks  
 cocaine: koh-KANE  
 coccol, -coccus: COCK-sye but COCK-us  
 cochineal: COTCH-n-eel, COACH-  
 codify: CODD-a-fye, CODE-  
 cognizance: COG-niz-uns  
 coiffure: kwah-FURE, KWAHF-ure  
 colander: CULL-un-der, COLL-  
 Colombia: cul-UMM-bee-a  
 Colorado: kahl-a-RADD-o, -RODD-o  
 column: KAHL-um  
 columnist: KAHL-um-ist, -um-nist  
 combat: (noun) COMM-batt; (verb) cum-  
 BATT, COMM-batt  
 combatant: cum-BATT-nt, COMM-ba-tunt  
 comely: CUMM-lee  
 comfortable: CUMF-tub-l, CUMM-fert-ub-l  
 Cominform: COMM-in-form  
 communal: cum-YOON-l, COMM-yun-l  
 communiqué: cum-YOON-a-KAY  
 comparable: COMM-prub-l, COMM-per-ub-l,  
 ÷ cum-PARE-ub-l  
 composite: cum-POZZ-ut, British COMP-a-zit  
 comptroller: cun-TROLE-r, comp-TROLE-r  
 comrade: COMM-radd, -rud  
 concerto: cun-CHEHRT-oh  
 conch: conk, contch  
 concord: CONN-cord; CONK-rd prevails for  
 some places so named  
 concubinage: cun-CUBE-n-idj  
 condolence: cun-DOE-luns, CONN-da-luns  
 conduit: CONN-doo-it, CONN-dit  
 confiscate: CONN-fis-keight, cun-FIS-keight  
 confrere: CONN-frehr  
 congeries: cun-JEER-eez, CONN-jeer-eez  
 conjure up or with: CUNN-jeer, CONN-jeer  
 connoisseur: CONN-a-SURR  
 consignee: conn-sa-NEE, cun-sine-EE  
 consignor: conn-sa-NOR, cun-sine-OR  
 constable: CONN-stub-l, CUNN-  
 consummate: (verb) CONN-sum-eight; (adj.)  
 cun-SUMM-ut  
 contemplative: cun-TEMP-la-tiv, CONN-tum-  
 plate-lv  
 contractor: (builder) CONN-track-r, cun-  
 TRACKT-r  
 contrary: (opposite) CONN-treh-r-ee; (stub-  
 born) also cun-TREHR-ee  
 controversial: con-tra-VURR-shul, -VURR-  
 see-ul  
 contumacy: cun-TOOM-a-see, CONN-ta-ma-  
 see  
 contumely: cun-TOOM-l-ee, CONN-ta-mee-lee  
 conversant: CONN-ver-sunt, cun-VERSE-unt  
 Copenhagen: cope-n-HAY-gun, -HAH-gun  
 copra: COAP-ra  
 coral: CAWR-ul, CAHR-ul  
 corduroy: CORD-a-roy  
 corollary: COR-ul-ehr-ee (cur-OLL-a-ree is  
 British)  
 corral: cur-AL  
 corrugate: COR-a-gate, COR-ya-gate, CAHR-  
 corsage: cawr-SAHZH, CAWR-sahzh  
 Coty, René: cut-TEE  
 coup: coo  
 coupé: coo-PAY, informally coop (rhymes  
 with group)  
 coupon: CUE-ponn, COO-ponn  
 Courant: (Hartford newspaper) Hartford peo-  
 ple usually say CURR-unt or COOR-unt;  
 the paper's editorial writers prefer coo-  
 RAHNT  
 courier: CURR-ee-er, COOR-  
 epturier: coo-TOOR-ee-eigh, -ee-er  
 covert: CUVV-rt; the cloth is also called  
 COAV-rt or COVV-rt  
 coxswain: COCKS-n  
 coyote: KYE-oat, kye-OAT-ee  
 crèche: cresh, craysh  
 credenza: cree-DENZ-a  
 creme de cacao: CREAM da COKE-oh, or  
 something approaching the French



creme de menthe: CREAM da MINT, or something approaching the French  
 cretonne: cree-TONN, CREE-tonn  
 euckoo: COOK-oo, COO-coo  
 cuisine: cwee-ZEEN  
 culinary: CULL-a-nehr-ee, CUE-la-  
 ousm laude: cum LAWD-ee, coom LOUD-ee  
 cupboard: CUBB-rd  
 cupola: CUPE-a-la, -a-loe  
 curacao: CURE-a-soe  
 curator: cure-EIGHT-r  
 Curle: cure-EE  
 cushaw: COO-shaw, coo-SHAW  
 cycle: SIKE-l  
 cyclical: SICK-lik-l, SIKE-lik-l  
 cynosure: SYNE-a-shure (don't confuse with  
*sinecure*, SYNE-a-cure)

dachshund: DAHKS-hoont  
 dahlia: DAL-ya, DAHL-ya  
 daiquiri: DIKE-r-ee, -EE  
 dals: DAY-us, dace  
 Dall: (Salvador) The Spanish is dah-LEE  
 data: DATE-a, DATT-a, DAHT-a  
 debacle: da-BAHK-l, da-BACK-l  
 debauch: dee-BAWTCH, -BOTCH  
 debouch: dee-BOOSH  
 debris: da-BREE, DAY-bree  
 Debussy: DEB-ya-SEE, da-BEW-see  
 debut: DAY-bev, day-BEW  
 debutante: DEB-ya-TAHT, -TANT  
 decade: DECK-aid  
 decadent: dee-CADE-nt, DECK-a-dunt  
 decal: DEE-cal, dee-CAL, DECK-l  
 decisive: dee-SISE-iv, -SIZE-iv  
 décollété: DAY-coll-a-TAY  
 décor: day-CORR  
 decorous: DECK-r-us, dee-CORE-us  
 decoy: dee-COY, DEE-coy  
 defalcation: dee-fal-CASHE-n, dee-fawl-,  
*deff-l-*  
 de Gaulle, Charles: SHARL dug-OAL  
 deficit: DEFF-a-sit  
 Delhi: (India) DELL-ee (certain places in  
 North America are DELL-high)  
 deluge: DELL-yuge, ÷ DELL-ooge  
 de luxe: da LOOKS, LUCKS, LUKES  
 demagogic: demm-a-GODJ-ik, -GOGG-ik  
 demagogu: DEMM-a-godj-ee, -gogg-ee  
 demesne: dee-MAIN, -MEEN  
 demonstrable: dum-ONN-strub-l, DEMM-un-  
 strub-l  
 demonstrate: DEMM-un-strait  
 dengue: DENG-ghee, DENG-eh, DENG-gew  
 denier: (of nylon, for instance) DENN-yer  
 depot: DEE-poh  
 derby: DURR-bee  
 derisive: der-EYE-siv, -ziv, -IZZ-iv  
 derrière: DEHR-ee-EHR  
 Des Moines: da MOIN  
 desperado: dess-per-AID-o, -AHD-o  
 despicable: des-PICK-ub-l, DESS-pick-ub-l  
 desuetude: DESS-wa-toode  
 desultory: DESS-l-tore-ee, DEZZ-  
 detail: DEE-tale, dee-TALE  
 deterrent: dee-TURR-unt  
 Detroit: dee-TROIT  
 de Valera, Eamon: EIGH-mun devv-l-AIR-a  
 devotee: DEVV-a-TEE  
 diabetes: dye-a-BEET-us, -BEET-eez  
 diamond: DYME-und, DYE-a-mund  
 dictator: DICK-tate-r, dick-TATE-r

diesel: DEEZ-l, DEES-l  
 digestion: didj-ESS-chun, dye-JESS-  
 digitalis: didj-a-TAL-us  
 dilettante: DILL-a-TANT, -TAHT, -TANT-ee,  
 TAHT-ee  
 diminution: dimm-a-NOOSH-n (not *dimm-ya-*  
 NISH-n)  
 diocesan: dye-OSS-a-sun, -zun  
 diocese: DYE-a-seece, -suss  
 dioceses: DYE-a-seece-uz, -suss-uz, ÷ -seece  
 diphtheria, diphthong: The *ph* is pronounced  
 f or p  
 direct: dur-EKT, dye-REKT  
 dirigible: DEAR-a-jub-l, dur-IDJ-ub-l  
 discretion: dis-CRESH-n  
 dishabile: DISS-a-BEEL  
 dispersion: dis-PURZH-n, -PURSH-n  
 disputable: dis-PUTE-ub-l, DISS-pya-tub-l  
 dissoluble: diss-OL-yub-l  
 distillate: DIST-l-eight, diss-TILL-ut  
 distraitt: diss-TRAY  
 diva: DEEV-a  
 divan: (couch) DYE-vann, dye-VANN  
 diverge: dye-VURDJ, duv-URDJ  
 divers: DIVE-rz  
 diverse: dye-VURCE, DYE-vurce, duv-URCE  
 divert: dye-VURT, duv-URT  
 divest: dye-VEST, duv-EST  
 divisive: div-EYE-siv, -ziv, -IZZ-iv  
 divorcee: duv-ore-SEE, -SAY  
 docile: DOSS-l, DOSS-gyle (DOE-syle is chiefly  
 British)  
 doldrums: DOLL-drumz  
 domicille: DOMM-us-l, -a-syle  
 donkey: DONK-ee, DUNK-ee  
 Don Quixote: DONN kee-HOAT-ee, QUICKS-ut  
 dos-à-dos: DOZE-a-DOE; in square dancing,  
 DOCE-ee-DOE  
 dour: rhymes with *hour*, less often with *tour*  
 drama: DRAHM-a, DRAMM-a  
 dramatis personae: DRAMM-a-tis pur-SOAN-ee  
 dramatist: DRAMM-a-tist, DRAHM-  
 dromedary: DROMM-a-dehr-ee, DRUMM-  
 drought: drouth, drouth  
 drouth: drouth, drouth  
 drowned: dround (not DROUND-ud)  
 Dumas: (novelist) DOO-mah, doo-MAH  
 Duclou, Jacques: du-CLOE  
 duodenum: doo-a-DEAN-um, doo-ODD-n-um  
 Dvořák: da-VORR-zhahk, VORR-zhahk  
 dynasty: DINE-us-tee  
 ebullient: ee-BUL-yunt, ee-BOOL-yunt  
 echelon: ESH-a-lonn  
 éclair: EIGH-clare, elgh-CLARE  
 economies: eke-n-OMM-ics, eck-n- (about  
 equally common)  
 eeru: AKE-roo, ECK-roo  
 eczema: ig-ZEEM-a, EKS-m-a, EGZ-m-a  
 Edam: EED-m, EE-dam  
 edict: EE-dikt  
 effort: EFF-rt, EFF-awrt  
 egotism: EE-go-tizz-m, EGG-o-  
 egret: ee-GRETT, EE-grett, EGG-rut  
 Eiffel Tower: IFE-l  
 eighth: aythh, ÷ ayth  
 Einaudi, Luigi: elgh-NOW-dee  
 Fire: EIGH-ra, -ree  
 either: EETHE-r, NEETHE-r are strangers to  
 no part of the U. S.; EYTHE-r, NEYTHE-r  
 are  
 Eleanor: ELL-a-ner

electoral: il-ECKT-r-ul  
 electricity: ee-leck-TRISS-ut-ee  
 eleemosynary: ell-um-OSS-n-ehr-ee  
 elegiac: ell-a-JYE-ack, il-EEDI-ee-ack  
 elephantine: ell-a-FAN-tyne, -FAN-teen, -FANT-n  
 eleven: ul-EVV-n, ul-EBB-m; in rapid speech the first syllable may be lost  
 elite: elgh-LEET  
 elixir: il-ICKS-r  
 elongate: ee-LAHNG-gate, -LAWNG-gate  
 Elysian: il-IZH-n  
 emendation: ee-men-DAYSH-n, em-un-  
 émigré: EMM-a-GRAY  
 employee: emm-ploi-EE, im-PLOI-ee  
 encore: AHN-core, AHNG-  
 encyclical: en-SICK-lik-l, -SIKE-lik-l  
 endive: ENN-dyve  
 ennui: AHN-WEE  
 en route: ahn ROOT, enn, inn  
 ensemble: AHN-SAHM-bul  
 ensign: (officer) ENN-sn, (flag) also ENN-syne  
 entente: AHN-TAHNT  
 entrails: ENN-trulz  
 entree: AHN-tray, ahn-TRAY  
 entrepreneur: AHN-tra-pra-NURR, -pa-NURR  
 envelope: ENN-vul-ope, AHN-  
 envoy: ENN-voy, AHN-voy  
 epaulet: EPP-l-ETT  
 ephedrine: if-EDD-rin, EFF-a-dreen  
 epicurean: epp-a-cure-EE-un  
 epitome: ee-PITT-m-ee  
 epizootic: epp-a-zoh-OTT-ik  
 epoch: EPP-uk, EPP-ock, EE-pock  
 equator: ee-KWATE-r, EE-kwate-r  
 equine: EE-kwyne  
 equipage: ECK-wa-pidj  
 equitable: ECK-wut-ub-l  
 era: EAR-a, EE-ra  
 err: urr, ehr  
 errant: EHR-unt  
 error: EHR-er  
 ersatz: EHR-zahts, ehr-ZAHTS  
 erudite: EHR-ya-dyte, EHR-a-dyte  
 erysipelas: ehr-a-SIPP-l-us, ear-  
 spaller: ess-PAL-yer  
 espionage: ESS-pee-a-NAHZH, -NAHDJ, -nidj  
 esplanade: ESS-pla-naid, -naid  
 espouse: see SPOUSE  
 esquire: ESS-kwyre, es-KWYRE  
 etc.: un(d) SO foarth, et SETT-r-a, et  
 SETT-ra  
 Eustachian: yoo-STAYSH-n, -STAKE-ee-un  
 evangelical: ee-vann-JELL-ik-l, evn-n-JELL-  
 evening: (time of day) EEV-ning; (making  
 even) EEV-n-ing, EEV-ning  
 evidently: EVV-a-dent-lee, -dunt-lee, -DENT-  
 lee  
 evolution: evv- (eev- is chiefly British)  
 ewe: yew; by sheep raisers also yoh  
 ex cathedra: eks ca-THEDE-ra, eks CATH-a-  
 dra  
 excretory: EKS-cra-toar-ee (iks-CRETE-r-ee  
 is chiefly British)  
 exculpate: EKS-cul-pate, eks-CULL-pate  
 executive: ig-ZEKK-y-a-tiv, ÷ -ZEKK-a-tiv  
 exemplary: ig-ZEMP-ler-ee, EGZ-m-plehr-ee  
 exigency: EKS-a-jun-see (ig-ZIDJ-n-see is  
 chiefly British)  
 exile: EGZ-yte, EKS-  
 exotic: egz-OTT-ik, eks-  
 experiment: iks-PEHR-a-ment, ÷ iks-PEAR-

expert: EKS-purr or, more often for adj.  
 than noun, eks-PURRT  
 explicable: EKS-plik-ub-l, eks-PLIK-ub-l  
 exploit: EKS-ploit or, more often for verb  
 than noun, eks-PLOIT  
 exposé: EKS-po-ZAY  
 exquisite: EKS-kwa-zit, eks-KWIZZ-ut  
 extol: eks-TOAL, -TOL  
 extraordinary: eks-TROED-n-ehr-ee  
 exude: eg-ZOOD, eks-OOD  
 façade: fus-AHD  
 facet: FASS-ut  
 facile: FASS-l  
 Fahrtheit: FAIR-un-hyte, FAHR-  
 faille: file  
 Falange: (Spanish) ful-AHNG-hay  
 falcon: FAWL-cun, FAL-cun, FAW-cun  
 fantasia: fann-TAY-zha, fant-a-ZEE-a  
 farina: fer-EEN-a  
 fascist: FASH-ist  
 Fatima: (cigarette) fa-TEEM-a; (Mohammed's  
 daughter, Bluebeard's wife) fa-TEEM-a,  
 FAT-m-a; (place in Portugal) FAT-m-a  
 faux pas: FOE PAH  
 February: FEBB-a-wehr-ee, FEBB-yu-ehr-ee,  
 FEBB-roo-ehr-ee  
 fecund: FECK-und, FEEK-und  
 ferrule: FEHR-ul, -ool  
 fete: feight  
 fetish: FEET-ish (the British apparently often  
 say FETT-ish)  
 fiancé(e): FEE-ahn-SAY, fee-AHN-say  
 fidelity: fye-DELL-ut-ee, fud-ELL- (but the  
 fye- pronunciation is rare in *high-fidelity*)  
 figure: FIGG-yer (FIGG-er, though the only  
 common British pronunciation, is widely  
 regarded as substandard in the U. S.)  
 flet: fil-EIGH, FILL-elgh, FILL-ee  
 flet mignon: FILL-elgh, or FILL-ee, meen-  
 YOH (with -YOH pronounced through the  
 nose)  
 flet of sole: FILL-ee uv SOLE  
 finale: fin-AHL-ee, -AL-ee  
 finance: FYE-nants, fun-ANTS, fye-NANTS  
 financial: fye-NANTCH-l, fun-ANTCHL-l  
 financier: FINN-un-SEER, fye-nann-SEER  
 finesse: fin-ESS  
 finis: FYE-nis, FINN-ls  
 fiord: fyord, fee-ORD  
 fission: FISH-n, FIZH-n  
 flaccid: FLAK-sid, ÷ FLAS-id  
 flagrant: FLAY-grunt  
 fluoroscope: FLOOR-a-skope (FLOOR- rhymes  
 with TOUR), FLOO-er-a-skope  
 forbade: -BADD, -BAYED  
 forehead: FAWR-ud, FAHR-ud, FOAR-hedd  
 formidable: FORM-ud-ub-l, fer-MIDD-ub-l  
 fortnight: FORT-nite, -nut  
 fortune: FORCH-n  
 foyer: FOI-er, FOI-yay, FWAH-yay  
 fracas: FRAY-kus, FRACK-us  
 fragile: FRADJ-l  
 frequent: (verb) free-KWENT, ÷ FREE-kwent  
 frontier: FRUN-TEER, FRON-  
 frontispiece: FRUNT-us-peece, FRONT-  
 fungi: FUN-fye, ÷ FUNG-guy  
 futile: FUTE-l  
 gala: GALE-a, GAL-a  
 Galapagos: gul-AHP-a-guss



gallant: (brave) GAL-unt; (lady's man) more often gul-ANT or gul-AHNT  
 gangrene: GANG-GREEN, GAN-GREEN  
 gape: gayp, gapp  
 garage: ger-AHDJ, -AHZH  
 Garand: (rifle) GAIR-und, gur-AND  
 garrulous: GAIR-ya-lus, GAIR-a-  
 gaseous: GASS-ee-us, GASH-us (the British usually say GAZE-ee-us)  
 genealogy: jenn-ee-AL-a-jee, ÷ -OLL-a-jee  
 genuine: JENN-ya-wun, ÷ -wyne  
 gerrymander: GHEHR-ee-MAND-r, JEHR-ee-  
 gherkin: GHURR-kin  
 gibber(ish): JIBB-r(-ish), GHIBB-r(-ish)  
 Gila monster: HEEL-a  
 gimmick: GHIMM-ick  
 glacier: GLAYSH-r (the British usually say GLASS-ee-ur)  
 gladiolus: glad-ee-OAL-us, gla-DYE-a-lus  
 Goethe: GATE-ee (or as German)  
 golf: gahlf, gahf, gawf, gawlf  
 gondola: GONND-l-a, ÷ gonnd-DOAL-a  
 gooseberry: GOOCE-behr-ee, GOOZE- (the last is less common in U. S. than in England)  
 gourmet: GOOR-may  
 government: GUVV-ur(n)-munt, GUBB-m-unt  
 governor: GUVV-n-ur (the first r is seldom pronounced)  
 granary: GRAIN-r-ee, GRANN-  
 gratis: GRATE-is, GRAT-tis  
 grease: (verb) greece, greeze  
 greasy: GREECE-ee, GREEZE-ee  
 grievous: GREEV-us (not GREE-vee-us)  
 grimace: GRIMM-us, grim-ACE  
 Gromyko, Andrei: groe-MEE-koe  
 grosgrain: GROE-grane  
 guarantee: GAIR-un-TEE (GAHR- is regional)  
 gubernatorial: gube-r-na-TORE-ee-ul, goob-r-  
 Guiana: ghee-AHN-a, -ANN-a  
 guimpe: ghimp, gamp  
 Guinea: GHINN-ee  
 gynecology: jinn-a-COLL-a-jee, ghine-a-, jyne-a-

Haakon: HAWK-n  
 habitué: ha-BITCH-a-WAY  
 Haile Selassie: HIGH-lee sul-ASS-ee  
 halibut: HAL-a-but, HOLL-  
 hallowed: in the Lord's Prayer, often 3 syllables  
 Halloween: HAL-a-WEEN, HOLL-  
 Hammarskjöld, Dag: HAMM-r-shuld  
 handkerchief: HANK-r-chif, -chief  
 hangar: HANG-r, HANG-ahr  
 harass: ha-RASS, HARE-us  
 hauteurs: hoe-TURR, haw-  
 Hawaii: ha-WYE-ee, ha-WAH-ee, ha-WAW-ee, -ya  
 hegemony: hee-JEMM-a-nee, HEDJ-m-un-ee  
 height: hyte, ÷ hightth  
 heinous: HANE-us (not HEEN-ee-us or HANE-ee-us)  
 Helena: (Arkansas, Montana) HELL-a-na; but St. Helena Island is saint-l-EEN-a  
 helicopter: HELL-a-copt-r  
 herb: urb, hurb  
 Herculean: hur-CUE-lee-un, hurk-ya-LEE-un  
 Hereford: (cattle) HUR-ferd  
 heretic: HEHR-a-tic  
 heretical: hur-ETT-ik-l

hermaphrodite: her-MAFF-ro-dyte (not MORF-a-dyte)  
 hero: HEE-roe, HEAR-oe  
 heroine: HEHR-a-win  
 heroism: HEHR-o-izm-m  
 hiccup: HICK-up  
 hilarious: hll-AIR-ee-us, high-LAIR-  
 Himalaya: him-a-LEIGH-a, him-AHL-ya, him-AHL-a-ya  
 Hirohito: hee-roe-HEE-toe  
 Hiroshima: hear-o-SHEEM-a, hear-OSH-a-ma  
 Ho Chi Minh: HOE CHEE MEAN  
 Holstein: (cattle) HOAL-steen, -stye  
 homicide: HOMM-a-syde, HOME-  
 Homo sapiens: HOE-moe SAY-pee-unz, -ens, SAPP-ee-  
 Honolulu: honn-l-OO-loo, hone-l-  
 hors de combat: ORR (or HERR) duh COMM-batt  
 hors d'oeuvres: ORR DURV(Z), ORR DUV(Z)  
 hosiery: HOE-zher-ee  
 hospitable: hoss-PITT-ub-l, HOSS-pitt-  
 hostage: HOSS-tldj  
 hostile: HOST-l  
 Houston: (Texas city) HUCE-tun; (N. Y. C. street, Ca. county) HOUCE-tun  
 hover: HUVV-r, HOVV-r  
 human: HUME-un; esp. by urban speakers, also YUME-un  
 humble: HUMM-bul, UMM-bul  
 humor: HUME-r; esp. by urban speakers, also YUME-r  
 hurricane: HURR-a-caine, HURR-ik-n  
 hybrid: HIBE-rid  
 hydrangea: hye-DRAIN-ja, -DRANN-ja  
 hygiene: HYE-jean  
 hygienic: hye-JEAN-ik, hye-jee-ENN-ik  
 hyperbole: hye-PURB-l-ee  
 hysteria: hiss-TEER-ee-a, -TEHR-

identical, -tity: eye-DENN-, id-ENN-  
 ideology: eye-dee-OLL-a-jee, idd-ee-  
 ignominy: IGG-num-inn-ee  
 ignoramus: igg-ner-AIM-us, -AMM-us  
 Illini: il-EYE-nye  
 Illinois: ill-a-NOY  
 illustrate: ILL-us-trate, much less often il-USS-trate  
 impasse: IMM-pass, imm-PASS  
 impetigo: imm-pa-TYE-goe, -TEE-goe  
 impious: IMM-PYE-us, IMP-ee-us  
 implacable: im-PLAKE-ub-l, -PLACK-ub-l  
 improvisation: imm-provv-a-ZAYSH-n, imm-pra-va-  
 inaugurate: in-AWG-yur-ate, ÷ -AWG-r-ate  
 inchoate: in-KOE-it, INN-koe-eight  
 incognito: in-COG-na-toe, ÷ in-cog-NEE-toe  
 incomparable: see COMPARABLE  
 inculcate: in-CUL-cate, INN-cul-cate  
 indefatigable: INN-dee-FATT-ig-ub-l  
 indisputable: see DISPUTABLE  
 indissoluble: see DISSOLUBLE  
 inextorable: in-EKS-r-ub-l, -EGZ-r-  
 inexplicable: see EXPLICABLE  
 infantile: IN-fun-tyle, -till, -teel  
 ingenious: in-JEAN-yuss  
 ingenué: ANN-ja-noo  
 ingenuous: in-JENN-ya-wuss  
 inherent: in-HEAR-unt, in-HEHR-unt  
 inimical: in-IMM-ik-l  
 initiative: in-ISH-a-tiv, in-ISH-ee-a-tiv

**inquiry:** in-KWIRE-ee, IN-*kwire*-ee, IN-kwur-ee  
**insular:** INS-l-ur, IN-shul-ur  
**integral:** IN-tee-grul, IN-TEG-rul, in-TEE-grul  
**intelligentsia:** in-tell-a-JENTS-ee-a, -GHENTS-ee-a

**internecine:** int-r-NEECE-yne, -NEECE-n, -NESS-yne, -NESS-n

**interstices:** in-TURR-sta-suz (not -seez)

**inundate:** IN-un-date, in-UN-date

**invalid:** (ailing) IN-vu-lid, (not valid) in-VAL-id

**inveigle:** in-VEEG-l, -VAGUE-l

**iodine:** EYE-ud-yne, -ud-n, -ud-*een*

**Iowa:** EYE-a-wuh, -a-way (not eye-OH-a)

**Iran:** ir-AHN, ir-ANN, eye-RANN

**Iranian:** ir-ANE-ee-un, eye-RANE-ee-un, ir-AHN-ee-un

**Irene:** eye-REEN (the British say eye-REEN-ee)

**Irrefutable:** see REFUTABLE

**Irrevocable:** see REVOCABLE

**Islam:** IZZ-lahm, IZZ-lamm, is-LAHM, is-LAMM

**isolate:** ICE-l-ate, ISS-l-ate

**Israeli:** iz-RALE-ee

**Italian:** it-TAL-yun (eye-TAL- is humorous or nonstandard)

**-itis:** (as in *appendicitis*) -ITE-is, occasionally -EET-is

**jaguar:** JAG-wahr

**Jekyll:** JEEK-l, JECK-l

**jocund:** JOCK-und, JOKE-und

**joust:** rhymes with *soused*, less often with *bust*

**Jowl:** rhymes with *howl*, less often with *hole*

**jugular:** JUGG-yul-r, JOOG-

**juvenile:** JOOV-n-yle, -n-l

**ketchup:** KETCH-up, KATCH-up, KATS-up

**khaki:** CACK-ee, COCK-ee

**Khrushchev, Nikita:** nyee-KEE-ta hroosh-CHAWF

**kiln:** kill, kiln

**kimono:** kum-OAN-a

**kindergarten:** KINN-dur-gahrt-n, -gahrd-n

**Kleffens, Elco van:** AIL-koh vahn KLEFF-nce

**kowtow:** 1st syllable rhymes with *cow* (less often with *go*), 2d with *cow*

**lambaste:** lam-BAYST, -BASST

**lamentable:** LAMM-un-tub-l, lum-ENT-ub-l

**languor:** LANG-r, LANG-gur

**Laniel, Joseph:** lann-YELL

**Laos:** louce (rhymes with *house* noun), LAY-oss

**lapel:** la-PELL

**larynx:** LAIR-luks (not LAHR-niks)

**lasso:** LASS-oh (lass-OO is probably non-standard)

**lava:** LAHV-a, LAVV-a

**legume:** LEG-yoom, lee-GYOOM

**Le Havre:** luh HAHV, HAHV-ra, ÷ HARV

**leisure:** LEEZH-r, LEZH-r

**length:** leng(k)th, ÷ lenth

**Lenin:** LENN-in

**lever:** LEEV-r, LEVV-r

**levls:** (jeans) LEE-vyze

**liaison:** LEE-a-zonn, -ZONN (or -sonn, -SONN), lee-AZE-on, lee-AZE-n

**libertine:** LIBB-r-teen (-tyne is chiefly British)

**libido:** lib-EYE-doh, -EE-doh

**library:** LIBE-rehr-ee, LIBE-r-ee, LIBE-ree

**lichen:** LIKE-n

**licorice:** LICK-rish, LICK-r-ish, -riss, -r-iss

**lilac:** LILE-uk, -ack

**lingerie:** LAHN-zhur-EE, -AY, LANN-zher-EE, -jur-

**liqueur:** lic-KURR

**literati:** litt-r-AHT-ee, -EIGH-tye

**literature:** LITT-r-uh-choor, -chur, -tyoor,

LITT-ruh-, LITT-r-cher

**loath:** (adj.) rhymes with *both*

**loathe:** (verb) rhymes with *clothe*

**loathsome:** first part rhymes with *both* or *clothe*

**loge:** loazh

**longevity:** lahn-JEVV-a-tee

**long-lived:** LONG-LYVED, -LIVVD

**Los Angeles:** loss ANDJ-l-us, ANG-gul-us (the first has been "officially" adopted in Los Angeles)

**Louisiana:** LOO-uz-ee-ANN-a, luh-WEEZ-ee-, in the state also LOO-zee-ANN-a

**Louisville:** (Ky.) LOO-ee-vill, -eev-l

**Louvre:** loov, LOO-vruh

**lower:** (look dark) rhymes with *tower*

**luxury:** LUKSH-r-ee, LUGZH-r-ee

**macabre:** ma-CAHB-r, -CAHB-ruh

**Mach:** mahk

**machete:** ma-SHETT-ee, ma-SHETT

**machination:** mack-n-AYSH-n

**macron:** MAY-kronn, -krun (MACK- is chiefly British)

**madame:** usually MADD-um (like *madam*) when preceding a name; elsewhere also

mudd-AMM, madd-AMM, -AHM

**mademoiselle:** MADD-um-uz-ELL, MADD-

muz-ELL, mamm-ZELL

**madras:** (fabric) MADD-rus, mud-RASS, mud-RAHS

**maelstrom:** MALE-strum

**maestro:** MICE-troh, mah-ESS-troh

**Magdalene:** (Mary) MAGG-dul-*een*, magg-dul-EE-nee

**Magi:** MAY-fye

**Magsaysay, Ramon:** rah-MUNN mahg-suss-EYE

**Magyar:** MAGG-yahr, MAHD-yahr

**maintenance:** MAINT-n-unts, MAINT-nunts (not main-TAIN-unts)

**Malan, Daniel:** mul-AHN

**Malenkov:** Russian seems to be mahi-yun-KOFF

**malinger:** mul-ING-gur

**mañana:** mun-YAHN-a, -YANN-a

**maniacal:** mun-EYE-uk-l

**Mao Tse-tung:** MOW DZUH DOONG (MOW rhymes with HOW)

**maraschino:** mare-us-KEE-noh, ÷ mare-a-SHEE-noh

**Mardi gras:** MAHR-dee GRAH

**margarine:** MAHRDJ-r-in, -een

**Marguerite:** MAHRG-r-EET, -yur-EET

**marijuana:** mare-a-WAHN-a, -HWAHN-a

**marital:** ("of marriage") MARE-ut-l (don't confuse with *martial*, "of war," MAHRSH-l)

**Marseilles:** MAHR-SAY, -SAILZ

**marshmallow:** MAHRSH-mal-o, -mel-o

**massacre:** MASS-a-ker (not -kree)

**mausoleum:** mawce-l-EE-um

**mauve:** mohv



- medicinal: mud-ISS-n-l  
 medieval: mee-dee-EEV-l, medd-ee-  
 mediocre: mee-dee-OAK-r  
 melee: may-LAY, MAY-lay, mul-AY  
 membranous: MEMM-brun-us  
 Menderes, Adnan: ahd-NAHN mend-r-ESS  
 Mendès-France, Pierre: PYAIR mann-dess-  
 FRAHNCE  
 menstruate: MENN-stru-ate, ÷ MENN-strate  
 mercantile: MURK-n-teel, -tyle, -till  
 mesdames: may-DAHM, -DAMM  
 mesquite: mus-KEET  
 messrs.: MESS-urz  
 metamorphosis: mett-um-ORF-us-us, -orr-  
 FOCE-us  
 -meter: when a vowel precedes (as in *baram-  
 eter, hexameter*), mut-r, except in metric-  
 system terms, in which it is meet-r (as  
 in *KILL-um-eet-r kilometer*); when no  
 vowel precedes, meet-r, as in *VOLT-meet-r  
 voltmeter*  
 migraine: MY-grane  
 minute steak: MINN-it  
 mirage: mir-AHZH  
 miscellany: MISS-l-ane-ee (miss-ELL-un-ee is  
 British)  
 mischievous: MISS-chuv-us (not miss-CHEVE-  
 us or miss-CHEVE-ee-us)  
 misled: MISS-LEDD (not MIZZ-ld)  
 mobile: (adjective) MOBE-l, MOE-beel; (orna-  
 ment) MOE-beel, MOBE-l; MOE-byle is  
 infrequent for either in U. S.  
 Mobile (Alabama) moe-BEEL  
 moiré: (adjective: "watered"; verb: "to  
 water"; noun: "watered appearance or  
 fabric") mwah-RAY or morr-AY. For the  
 fabric some consider *moire*, pronounced  
 mwahr or morr, the preferable or the only  
 proper term. Since most English type fonts  
 have no é, one often cannot be sure how  
 many syllables are intended by *moire*.  
 molecule: MOLL-i-kewl (MOHL- is chiefly  
 British)  
 molester: mo-LEST-r  
 Molotov: MOLL-uh-toff  
 momentous: mo-MENT-us (not mo-MENCH-  
 us)  
 monetary: MONN-a-tehr-ee, MUNN-  
 Mongol: MONG-gul  
 mongrel: MUNG-grul, MONG-  
 monsieur: mus-YUH  
 monsignor: monn-SEEN-yur  
 montage: monn-TAHZH, mun-  
 Montevideo: monn-tuv-ID-EIGH-oh, monn-  
 tuv-IDD-ee-oh  
 Monticello: (Jefferson's) monn-tl-CHELL-oh  
 mores: MOAR-eez  
 Moscow: last syllable rhymes with *how* or  
*hoe*  
 motif: moe-TEEF  
 motorcycle: MOTE-r-sike-l (see *bicycle, tri-  
 cycle*)  
 Mrs.: MISS-uz, -us; in the South commonly  
 MIZZ-iz, mizz, or (before a given name)  
 miss  
 Muenster: (cheese) MUNN-stur, MOON- (OO  
 as in *wood*)  
 mulatto: mull-ATT-oh or -a, mew-LATT-oh  
 municipal: mew-NISS-up-l  
 Muñoz Marín, Luis: moon-YAWS mah-REEN  
 museum: mew-ZEE-um  
 mustache: muss-TASH, MUSS-tash  
 naked: NAY-kud, ÷ NEKK-ud  
 napalm: NAY-pahm  
 nape: napp, napp  
 naphtha: NAP-tha, NAF-  
 nascent: NASS-nt, NACE-nt  
 nauseated: NAWSH-ee-ayt-id, NAWZH-ee-,  
 NAWZ-ee-, NAUCE-ee-  
 Nazi: NAHTS-ee, NATTS-ee, NAHZ-ee, NAZZ-  
 ee  
 nee: nay  
 Nehru, Jawaharlal: juh-WAH-hur-lahl NEIGH-  
 roo  
 neither: see EITHER  
 Nenni, Pietro: NANE-nee  
 nephew: NEFF-yew (NEVV-yew is chiefly  
 British)  
 Neufchâtel: NOO-sha-TELL  
 Nevada: nuv-ADD-a, -AHD-a  
 Newfoundland: NOOF-n-lund, -land, -LAND  
 New Orleans: ORL-ee-unz, ORL-nz (or-  
 LEANZ seldom used there)  
 niche: nitch  
 nightingale: NITE-n-gail  
 nomad: NOAM-add, NOMM-ud  
 nomenclature: NOAM-un-clay-cher, noe-  
 MENN-cla-choor  
 nonagenarian: nonn-a-jun-EHR-ee-un, noan-  
 nonchalant: NONN-shul-unt, -AHNT  
 Norfolk: NORF-uk, -awk  
 Notre Dame U.: NOAT-r DAME (rhymes with  
*tame*)  
 nougat: NOO-gut  
 nuisance: NOOCE-nts, NOO-us-nts  
 oasis: oh-ACE-us, OH-us-us  
 obdurate: OBD-r-ut, obb-DOOR-ut  
 obeisance: oh-BACE-nts, oh-BEECE-nts  
 obesity: oh-BESS-ut-ee, -BEECE-  
 obligatory: ub-LIGG-a-toar-ee, OBB-lig-a-  
 oblique: ub-LEEK, -LIKE (the 2d is the usual  
 military pron.)  
 oboe: OAB-oh  
 obscurity: ob-SENN-ut-ee, -SEEN-  
 obscurantist: ob-SCURE-un-tist, obb-scure-  
 ANT-ist  
 octave: OCK-tiv, -tayve  
 octopus: OCK-tup-us  
 often: OFF-n, OFF-tun  
 oleomargarine: See MARGARINE  
 omega: oh-MEGG-a, oh-MEEG-a, oh-MAYG-a  
 omelet: OMM-lut, OMM-l-ut  
 orang-outang: oh-RANG-a-tang  
 orchestra: ORK-us-truh  
 ordeal: OR-DEAL, OR-deal  
 Oregon: ORR-ig-n, -a-gonn  
 orgy: ORDJ-ee  
 ornery: ORN-r-ee, ORN-ree, ONN-r-ee, ONN-  
 ree  
 overalls: not -haulz  
 overt: oh-VURT, OH-vurt  
 Pagliacci: pahl-YATCH-ee, pal-  
 palaver: pul-AVV-r, -AHV-r  
 panorama: pann-r-AMM-a, -AHM-a  
 pantheon: PANN-thee-onn, -un, pann-THEE-  
 un  
 Papagos, Alexander: pah-PAH-gawss  
 papier-maché: PAPE-r-muh-SHAY  
 paprika: puh-PREEK-a, PAPP-ree-ka  
 Paraguay: PAIR-a-gwey, -gweigh  
 paresis: pur-ECE-is, PARE-us-is  
 pariah: pur-EYE-a  
 parliament: PAHRL-um-unt, ÷ -yum-unt

**Parmesan:** PAHRM-uz-*ann*, -uz-*n*  
**partner:** PARD-ner is substandard  
**passé:** PASS-AY  
**pasteurize:** PAST-r-ize, PASS-chur-  
**patent:** (right) PATT-nt; (clear) PATE-nt;  
 (in "patent leather") PATT-nt in U. S.,  
 usually PATE-nt in England  
**patina:** (film) PATT-n-a, ÷ puh-TEEN-a  
**patio:** PAHT-ee-oh, PATT-  
**patriot:** PAY-tree-ut (PATT-ree-ut is British)  
**patronage, -ize:** PAY-trun-, PATT-run-  
**pecan:** pee-CANN, -CAHN, PEE-cann, -cahn  
**pecko:** PEE-koe (PECK-oe is chiefly British  
 but possibly not the usual British pron.)  
**pellagra:** pul-AIG-ra, -AGG-ra  
**penalize:** PEEN-l-ize, PENN-  
**pendulum:** PENJ-l-um, PEND-l-um  
**penicillin:** penn-a-SILL-un  
**peninsula:** pin-INS-l-a, -IN-shul-a  
**penult:** PEE-nult  
**peon:** PEE-un  
**peony:** PEE-un-ee (PINE-ee is dialectal)  
**percale:** pur-KALE, PURR-kale, pur-KAL (the  
 last prevails in the South)  
**percolator:** PURK-l-ate-r (not PURK-yul-)  
**per diem:** pur DEE-um, DYE-um  
**peremptory:** pur-EMPT-r-ee, -EMPT-ree  
**perfect:** (verb) pur-FEKT, ÷ PURR-fkt  
**pergola:** PURG-l-a, ÷ pur-GOAL-a  
**permit:** (verb) pur-MIT; (noun) PURR-mit,  
 pur-MIT  
**Perón, Juan:** per-RAWN  
**per se:** PURR SAY, SEE  
**persist:** pur-SIST, -ZIST  
**persona non grata:** pur-SOAN-a nonn GRATE-  
 a, GRAHT-a, GRAT-t-a  
**perspiration:** purce-pur-AYSH-n (not press-  
 pur-)  
**petite:** puh-TEET  
**petit jury:** PETT-ee joor-ee  
**pharynx:** FAIR-inks (not FAHR-niks)  
**Phi Beta Kappa:** FYE bate-a KAPP-a, beet-a  
**philately:** fl-ATT-l-ee  
**Phillistine:** fl-IST-un, FILL-us-teen  
**phlegm:** flemm  
**phlegmatic:** fleg-MATT-ik  
**photogravure:** FOAT-o-gruv-YOOR, -GRAVE-  
 yur  
**pianist:** pee-ANN-ist, PEE-un-ist  
**pianoforte:** pee-ANN-o-FORT-ee, -o-fort  
**pico:** PEE-koe  
**pièce de résistance:** pee-ESS duh ray-zeece-  
 TAHNCE  
**Pinay, Antoine:** pee-NAY  
**pince-nez:** PANCE-NAY, PINCE-  
**pincers:** PINCH-rz, PINCE-rz  
**piquant:** PEEK-unt, PICK-wunt, PEEK-wunt  
**pistachio:** pis-TASH-ee-oh, -TASH-oh, pis-  
 TASHH-  
**pituitary:** pl-TOO-a-tehr-ee  
**pizza:** PEET-sa  
**placard:** (noun) PLACK-ahrd, -urd; (verb)  
 plac-KAHRD, PLACK-ahrd  
**placate:** FLAKE-ate, PLACK-ate  
**placer:** (mining) PLASS-r  
**plenary:** PLEEN-r-ee, PLENN-  
**poignant:** POIN-yunt, POIN-unt  
**poinsettia:** poin-SETT-ee-a, ÷ -SETT-a  
**Pollibure:** po-LITT-byoor-o, POLL-it-, POLE-  
 it-  
**polka:** POLE-ka probably more common for  
 the dance, POKE-a in polka dot

**portentous:** porr-TENT-us (not -TENCH-us)  
**Portuguese:** PORCH-a-GHEEZ  
**positively:** POZZ-a-tiv-lee; in sense "emphati-  
 cally yes," also POZZ-a-TIV-lee  
**posthumous:** POSS-chum-us  
**potpourri:** POE-poo-REE, pott-POOR-ee  
**Prague:** prahg, much less frequently pralg  
**praline:** PRAHL-eeen  
**precedence:** pree-SEED-ns, PRESS-ud-uns  
**precedent:** (noun) PRESS-ud-unt  
**prelude:** PRELL-yood, PREE-lood, ÷ PRELL-  
 ood, PRAY-lood, PRAYL-yood  
**premature:** PREE-ma-TOOR, -CHOOOR  
**premier:** (prime minister) prum-EAR, prum-  
 YEHR, FREEM-ee-ur  
**premiere:** prum-YEHR, prum-EAR  
**preparatory:** pree-PAIR-a-toar-ee, PREPP-r-a-  
**presentation:** pree-zen-TAYSH-n, prez-n-,  
 preez-n-  
**president:** PREZZ-ud-unt, -ent, PREZZ-dunt  
**prestige:** pres-TEEZH, -TEEDJ  
**pretty:** (adjective) PRITT-ee, POORT-ee; (ad-  
 verb) POORT-ee, PRITT-ee, purt-ee (1st  
 syllable unstressed)  
**pristine:** PRISS-teen, -tun, -tyne  
**probably:** PROBB-ub-lee, PROBB-lee  
**probity:** PROBE-a-tee, PROBB-  
**process:** PROSS-ess (PROE-sess is chiefly  
 British)  
**processes:** PROSS-ess-iz (not a Latin plural,  
 and hence not PROSS-a-seez)  
**produce:** (noun) PRODD-ooce, PROAD-ooce,  
 -yooce  
**productivity:** proe-duck-TIVV-a-tee, prodd-  
 uck-  
**program:** PROE-gramm, -grum  
**progress:** (noun) PROGG-ress, PROGG-riss,  
 (PROAG- is chiefly British)  
**promenade:** PROMM-un-AID, -AHD  
**promulgate:** proe-MULL-gate, PROMM-l-gate  
**promulgation:** proe-mull-GAYSH-n, promm-l-  
 pronunciation: proe-nunn-see-AYSH-n, ÷  
 -she-AYSH-n (the vowel between the two  
 n's in the second syllable is neither spelled  
 nor pronounced ou)  
**propaganda:** propp-a-GAN-da, proap-a-  
**pro rata:** proe RAYT-a, RAHT-a  
**protégé or protégée:** PROAT-a-ZHAY  
**protein:** PROAT-ee-in, PROE-teen  
**protestation:** prott-us-TAYSH-n, proat-us-,  
 proa-tess-  
**protocol:** PROAT-a-cahl, -cawl  
**provost:** (education official) PROE-vust,  
 PROE-voast, PROV-ust; (in "provost  
 marshal") PROE-voc  
**psychiatry:** suh-KYE-a-tree, sye-KYE-  
**ptomaine:** TOE-mane, toe-MANE  
**pueblo:** PWEBB-loe, pew-EBB-loe (the sec-  
 ond is the pron. of Pueblo, Colorado)  
**puerile:** PEW-er-ul, -yle  
**Puerto Rico:** POART-a REEK-o, PWEHRT-a  
**pulmonary:** first syllable rhymes with full or  
 hull  
**pumpkin:** PUNK-in, PUM-kin  
**purported:** pur-POART-id, PURR-poart-id  
**putt:** Rhymes with nut  
**pyramidal:** pear-AMM-ud-l  
**quandary:** KWOND-r-ee; kwonn-DAIR-ee, In-  
 frequent in U. S., seems to be common in  
 England  
**quasi:** KWAY-zye, -zee, -sye, -see, KWAH-  
 zee, -see

quay: kee  
 Queuille, Henri: CUR-yuh (approximate)  
 quinine: KWYE-nyne (the British say kwine-  
 EEN)  
 quintuplet: kwin-TUPP-lit, kwin-TOOP-lit,  
 KWIN-ta-plit  
 Quixote, Don: DONN kee-HOAT-ee, DONN  
 KWIK-sut  
 quoin: coin, kwoin  
 quolt: kwate, kwoyt  
 quote: kwoat, ÷ coat  
 rabies: RABE-eez, ÷ RABB-eez  
 radish: RADD-ish, ÷ REDD-ish  
 rapine: RAPP-un  
 rarebit: RAIR-but  
 ration: RASH-n, RAYSH-n  
 rationale: RASH-n-AL, -AHL-ee  
 Reading: (Pa. & Eng.) REDD-ing  
 recess: REECE-ess, ree-SESS (the verb is  
 more often ree-SESS than the noun)  
 recluse: ree-CLOOCE, RECK-looce  
 recondite: RECK-un-dyte, ree-KONN-dyte  
 recuperate: ree-KYOOP-r-ate, ÷ -KOOP-  
 refute: ree-FUTE-ub-l, REF-yut-ub-l  
 regime: ree-ZHEEM, ray-  
 relevant: RELL-uv-unt (not REVV-l-unt)  
 remonstrate: ree-MONN-strate  
 renaissance: RENN-a-ZAHNCE, -SAHNCE, ree-  
 NACE-nce (the last is probably rare for  
 the Renaissance that began in the 14th  
 century)  
 rendezvous: singular RAHN-duv-OO, plural  
 -OOZE  
 renegade: ree-NIGG, -NEEG  
 repairable: REPP-r-ub-l  
 repercussion: reep-r-KUSH-n, repp-r- (KUSH  
 rhymes with *mush*)  
 repertoire: REPP-u(r)-twahr, -tworr  
 reprise: (music) ruh-PREEZ  
 requiem: RECK-wee-um, REAK-  
 research: REE-surtch, ree-SURTCH  
 reservoir: REZZ-u(r)-vorr, -vwahr, -vworr, ÷  
 -voy  
 resources: REE-soarce-iz, ree-SOARCE-iz, ree-  
 ZOARCE-iz  
 respiratory: ree-SPIRE-a-toar-ee, RESP-r-a-  
 respite: RESS-pit, -pyte, ree-SPYTE  
 restaurant: REST-r-unt, -ahnt  
 résumé: REZZ-m-EIGH  
 retro: RETT-ro, rarely REE-tro  
 reveille: REVV-l-ee  
 revocable: REV-uk-ub-l, ree-VOKE-ub-l  
 revolt: ree-VOALT (ree-VAULT also occurs  
 but is not widespread)  
 Reykjavik: RAKE-yah-veek  
 Rhee, Syngman: SING-mun REE  
 ribald: RIBB-lid (but Browning rhymed it  
 with *piebald* PYE-bawld)  
 ricochet: RICK-a-SHAY  
 rigmarole: frequently so spelled but usually  
 pronounced RIGG-a-ma-roal  
 rigor mortis: RIGG-r MAWRT-is  
 rinse: rince (rence, rench, rinch, though  
 widespread, are usually considered dialectal  
 or substandard)  
 Rio de Janeiro: REE-o day (or dee) jun-  
 EHR-o, -EAR-o, zhun-  
 Rio Grande: REE-o (or REE-a) GRAND (less  
 often GRAND-ee), RYE-o (or RYE-a)  
 GRAND  
 rise: (noun) ryze (ryce is a sporadic pron.  
 considered by most persons artificial)

risqué: riss-KAY  
 Riviera: rivv-ee-EHR-a  
 robot: ROBE-ut, ROBE-ott, ROBB-ut  
 robust: roe-BUST, ROE-bust, ROE-bust  
 rodeo: ROE-dee-oh, much less often roe-  
 DAY-oh  
 rotogravure: ROAT-o-gruv-YOOR, -GRAVE-  
 yur  
 route: though there seem to be more Amer-  
 icans who rhyme this with *doubt* than  
 with *hoot*, many of the latter believe that  
 theirs is the only pron. suitable for an  
 educated person  
 ruckus: RUCK-us, ROO-kus  
 Saar: ZAHR  
 sabotage: SABB-a-TAHZH, -TAHDJ  
 sacrifice: SACK-ruf-yce, less often -iss  
 sacrilegious: ÷ sack-rul-IDJ-us, -EEDJ-us  
 sacroiliac: SACK-ro-ILL-ee-ack, SAY-cro-  
 sadism: SADE-iz-um, SADD-, SAHD-  
 safari: suf-AHR-ee, -AIR-ee  
 saga: SAHG-a  
 sail: as the second element in compounds,  
 as *mainsail*, *topsail*, pronounced -sl by  
 seafarers  
 Saint Helena: (Island) see HELENA  
 St. Laurent, L. S.: sann law-RAHN (the *nn*  
 and *N* merely to indicate that the preced-  
 ing vowel is nasal)  
 saith: seth, SAY-ith  
 Salazar, A. de O.: sal-uz-AHR  
 salmon: SAMM-un  
 salon: sul-ONN  
 salve: (ointment) savv, sahv; (salvage)  
 rhymes with *valve*  
 Santa Claus: SANT-a klawz, ÷ SANT-ee  
 sarsaparilla: sasp-r-ILL-a, sarsp-  
 satiety: suh-TYE-a-tee  
 satyr: SATT-r, SATE-r  
 Saud, ibn: sah-OD, SOWD (2d rhymes with  
 LOUD)  
 Saudi Arabia: sah-OD-ee, SOWD-ee  
 savant: suv-AHNT, or with full French pro-  
 nunciation  
 scallop: SKOL-up, SKAL-up  
 Seelba, Mario: SHELL-bah  
 scenario: sun-AIR-ee-oh, -AHR-  
 acenic: SEEN-ik, SENN-ik  
 Scheherazade: shuh-HEHR-uz-AHD, -AHD-uh  
 Schiaparelli: skapp-r-ELL-ee, skyahp-r-  
 schism: SIZZ-m  
 schist: shist  
 schizophrénia: skizz-a-FREEN-ee-a, *skits*-  
 scintillate: SINT-l-eight  
 scion: SYE-un  
 secretive: see-KREET-iv, SEE-krit-iv (the sug-  
 gestion of *secrete*, "exude," in see-KREET-  
 iv is abhorrent to many)  
 semi: SEMM-ee, SEMM-eye  
 senile: SEEN-yle, less often SENN-yle  
 sesame: SESS-um-ee  
 short-lived: SHORT-LYVED, -LIVVD  
 simultaneous: stme-l-TANE-ee-us, *simm-l*-  
 sinecure: SYNE-a-cure (don't confuse with  
*cynosure* SYNE-a-shure)  
 Sioux: soo  
 siren: SIRE-un  
 sirup: ÷ SURR-up, SEAR-up  
 ski: skee (the British seem to prefer "shee")  
 Slav: slavv, slahv  
 sleazy: SLEEZ-ee, SLAZE-ee



**sloth:** sloath, slawth  
**slough:** (castoff skin) sluff; (miry spot) rhymes with *who* or, esp. in New England, with *how*; (In "Slough of Despond") rhymes with *how* or *who*  
**smorgasbord:** SMORR-gus-board  
**snafu:** snaff-OO  
**sociology:** *soe*-shee-AHL-a-jee, *soe*-see-  
**sojourn:** (noun) usu. SOE-jurn; (verb) usu. *soe*-JURN (the British commonly say SODJ-rn for both)  
**solace:** SAHL-us  
**solder:** SODD-r  
**solon:** SOE-lun  
**sonorous:** sun-OAR-us, less often SONN-r-us  
**soot:** rhymes with *foot* or ÷ *cut* or *boot*  
**sporicif:** *sopp*-r-IFF-ik, *soap*-r-  
**setto voice:** SOTT-oe VOE-chee  
**sovereign:** SOVV-urn, SOVV-run, SOVV-ur-un, SUVV-  
**Soviet:** SOE-vee-et, -ut, SOVV-ee-et, -ut  
**Spaak, Paul Henri:** SPAHK  
**spayed:** spade (not SPADE-ud)  
**sphinx:** sfinks (not spinks)  
**spinet:** SPINN-it, spin-ETT  
**Spokane:** spoe-KANN  
**spouse:** rhymes with *louse*, much less often with *brows*; but *espouse* rhymes with *brows*  
**squalor:** SKWAHL-r, SKWALE-r  
**stalactite:** stul-ACK-tyte, STAL-uk-tyte  
**stalagmite:** stul-AGG-myte, STAL-ug-myte  
**Stalin:** STAHL-in, STAL-in, -een  
**status:** STATE-us, STATT-us; in New England, especially, also STAHT-us  
**-stein:** (in proper names) *stye* or *steen*; *steen* probably prevails in "Holstein" (cat-tle) and "Gravenstein" (apple)  
**stevedore:** STEEV-a-doar  
**stirrup:** STURR-up, STEAR-up  
**stomach:** STUMM-uk, ÷ -ik  
**strafe:** strayf  
**stratosphere:** STRATT-us-*far*  
**Strauss, Lewis:** strawz  
**strength:** streng(k)th, ÷ strenth  
**strychnine:** STRIK-nin, -nyne, -neen  
**suave:** swahv, much less often swayv  
**suavity:** SWAHV-a-tee, SWAVV-  
**subpoena:** suh-PEEN-a (-PEEN-ee is common but usually avoided in formal speech)  
**succinct:** suh-SINKT, ÷ sus-INKT  
**Suffolk:** SUFF-uk, -awk  
**suggest:** sug-JEST, sudj-EST  
**suite:** sweet; (of furniture) also ÷ sute  
**sumae:** SHOO-mack, SOO-  
**surrealism:** sur-REE-ul-izz-m  
**surveillance:** sur-VALE-nts, -VALE-yunts  
**suspect:** (adj.) more often sus-PEKT; (noun) more often SUSS-pekt  
**swelt:** sfelt  
**swastika:** SWOSS-tik-a, ÷ swoss-TEEK-a  
**swathe:** usually rhymes with -oth- in *bother*; the rhyme with *bathe* that dictionaries usually give seems to be quite rare  
**syringe:** sur-INDJ, much less often SEAR-indj  
**syrup:** see SIRUP

**talisman:** TAL-uz-mun, -us-  
**tarantula:** tur-ANTCH-l-a  
**tarpaulin:** tahr-PAWL-un, TAHRP-l-un, ÷ tahr-POLE-yun  
**tassel:** TASS-l, dialectal TOSS-l  
**taximeter:** TACKS-ee-meet-r  
**tedious:** TEED-ee-us, TEEDJ-us  
**Teheran:** tay-uh-RAHN  
**telegram:** TELL-a-gram; also -grum in the South  
**tenet:** TENN-ut (TEEN- in chiefly British)  
**Terpsichorean:** *turp*-sick-r-EE-un, *turp*-sick-r-  
**Terre Haute:** TEHR-a HOAT, TEHR-ee, ÷ HUTT  
**tester:** (canopy) TEST-r; also TEEST-r in the South  
**textile:** TEKST-yle, TEKST-l  
**Thailand:** TYE-land, -lund  
**Thames:** (in England) temmz; (in Connecticut) thaimz, temmz, occasionally taimz  
**thresh:** (grain) also spelled *thrash*; however spelled, more often pronounced *thrash* than *thresh* by farmers  
**thyme:** tyme  
**tiara:** tye-AIR-a, tee-AHR-a  
**Togliatti, Palmiro:** toal-YAHT-tee  
**tomato:** for the middle syllable: -MATE- is heard in all parts of the U. S.; -MAHT- is universal in England and is frequent in New England and New York City; -MATT- is a less frequent New England pronunciation  
**totalitarian:** *toe*-tal-a-TEHR-ee-un  
**toupee:** too-PAY  
**tournament, tourney:** First syllable TURRN-, TOORN-, or TORN-  
**tourneiquet:** first syllable TOORN- or TURRN-; third syllable -kut, -kett, or -kay  
**toward:** ("in the direction of") toard, tuh-WAWRD, twawrd  
**tragacanth:** TRADJ-a-kanth, -kunth, TRAGG-  
**transient:** TRANTCH-nt (the usual British pronunciation seems to be TRAN-zee-unt)  
**travail:** A book word that has no pronunciation tradition; truv-ALE or TRAV-ale will probably make you understood.  
**traverse:** (verb) truv-URCE (TRAV-erce seems to be usual in Great Britain but is infrequent in the U. S.)  
**tremendous:** tree-MEND-us (not -MENDJ-us)  
**tremor:** TREMM-r, less often TREEM-r  
**trespass:** TRESS-pus; the last syllable may also, more often in the verb than in the noun, be pronounced -pass  
**tribunal:** trybe-UNE-l, tribb-  
**tribune:** TRIBB-yune, tribb-YUNE  
**tricycle:** TRY-sick-l (see *bicycle*, *motorcycle*)  
**Trieste:** tree-ESST, tree-ESS-tay  
**trio:** TREE-oh (most dictionaries also give TRY-oh, but this pronunciation is seldom heard)  
**troche:** (lozenge) TROE-kee; the British also say troak, troash, troatch  
**troth:** trawth, troath  
**trough:** troff, nonstandard troth; U. S. bakers often rhyme with *hoe*, British bakers with *how*  
**truculent:** TRUCK-yul-unt, TRUKE-  
**tryst:** rhymes with *mist* or *iced*  
**tuberosa:** (flower) TOOB-roaz, TOOB-r-oace, TOOB-r-oaz

**table d'hôte:** TAHB-l DOAT, TABB-l  
**Tahoe:** TAH-hoe  
**Taj Mahal:** TAJHDJ muh-HAHL, TAHZH  
**talesman:** TAILZ-mun, TAIL-eez-mun

turbine: TURB-n, -yne

turquoise: TURRE-kotz, -kwoiz

tyranny: TEAR-un-ee

tyrant: TIRE-unt

ultimatum: ullt-m-ATE-m, much less often -AHT-m

Uruguay: YOOR-a-gwoye, -gweigh, OOR-

usage: YUCE-idj, YUZE-

usurp: yew-SURP, -ZURP

usurpation: yuce-r-PAYSH-n, yuze-r-

vagary: vug-EHR-ee, VAGUE-r-ee

van Gogh: van GO (Anglicized pronunciation: the Dutch pron. is impossible for one who knows only English sounds to pronounce)

variegate: VAIR-a-gait, VAIR-ee-a-

vase: vayce, infrequently vayze; in Great Britain: vahz, infrequently vawz

vaudeville: VAUD-uv-ill, VAUD-uv-l, VAUD-vill, VODD-; VOAD-vill

vegetable: VEDJ-tub-l, VEDJ-uh-tub-l

vehement: VEE-um-unt

vehicle: VEE-ick-l, -hick-l

Venus of Milo: VEE-nus; MEE-loe, MYE-

vermouth: vur-MOOTH

Versailles: vehr-SIGH, vurr-SIGH, vurr-SALEZ

version: VURZH-n

vertigo: VURR-tig-oe, vurr-TYE-goe, vurr-TEE-goe

veterinary: VETT-r-un-ehr-ee, VETT-n-ehr-ee

via: VYE-a, VEE-a

vice versa: VYCE-a VURCE-a, ÷ VYCE, VYCE-ee

Vienna: (Austria) vee-ENN-a; some U. S. places so named are vye-

viola: (instrument) vee-OAL-a, vye-

violinoncello: VYE-ul-un-CHELL-oe, VEE-; but usually spelled *cello* and pronounced CHELL-oe

virile: VEAR-ul; VYRE-, though recorded in most dictionaries, seems to be rare

virulent: VEAR-ya-lunt, VEAR-a-

vis-à-vis: VEEZ-a-VEE

viscount: VYE-count

visor: VYZE-r, rarely VIZZ-r

vitamin: VITE-um-in; the British frequently say VITT-

viva voce: VYE-va VOAS-ee

waft: a as in *whack* or as in *what*

Waikiki: WYKE-a-KEE

warrior: WAWR-ee-ur, WAWR-yur, WAHR-ee-ur

wash, Washington: WAWSH(-) or WAHSH(-); avoid WORSH(-)

wassail: WAHSS-l

water: WAWT-r, WAHT-r

Westminster: three syllables, not four: WEST-minst-r, not WEST-MIN-ust-r

wh-: with many (esp. in cities), not different from *w-*, *what* and *watt* being identical in sound

why: most speakers who pronounce *hwy* in asking a question pronounce *we* in other situations, as in "Why of course!"

wistaria, wisteria: usually pronounced wiss-TERE-ee-a, however spelled

wont: (custom) rhymes with *bunt* or *don't* or *want*

worsted: (cloth) first syllable rhymes with *puss* or ÷ *purse*

wrath: (U. S.) rhymes with *path*; (England) rhymes with *cloth*

wrestle: RESS-l, ÷ RASS-l

wroth: rawth, roath

Xavier: ZAY-vee-ur, much less often ZAVV-ee-ur

xylophonist: ZYLE-a-foan-ist

yearling: YERE-ling; by farmers also YURR-ling

Yosemite: yoe-SEMM-a-tee

zeal: zeel

zealot: ZELL-ut

zealous: ZELL-us

zinnia: ZINN-ee-a, ZINN-ya, ZEEN-ya

zoology: zoh-OLL-a-jee, ÷ zoo-OLL-

zwieback: SWEE-back, SWYE-, ZWEE-, ZWYE-

## Words Frequently Confused

adapt: to make suitable

adopt: to take as one's own; to accept

affect: to influence

effect: to accomplish

altar (noun): communion table

alter (verb): to change

berth: sleeping place

birth: being born

callous (adjective): unfeeling

callus (noun): hard skin tissue

capital (adjective): important

capital (noun): seat of government; accumu-

lated wealth; total stock

capitol (noun): building where legislature meets

complement: something that completes

compliment: expression of approval

corps: military unit

corpse: dead body

ouncil: deliberative body

counsel: advice, consultation, purpose

desert: due reward or punishment; waste land

dessert: sweet course at close of meal

dual (adjective): twofold

duel (noun): combat between two persons

dyeing: coloring

dying: at the point of death

ingenious: clever, skillful

ingenuous: frank, open, artless

loose (verb): to cut loose; to sever

lose (verb): to mislay; not to win

pedal (noun): lever worked by foot

peddle (verb): sell from house to house

principal (adjective): chief

principal (noun): head of school

principle (noun): basic truth, rule of conduct; the way anything works or is made

stationary: fixed, unchanging

stationery: writing materials

their (pronoun, adjective): of or belonging to them

there (adverb): in, at, or to a certain place

weather (noun): heat or cold, calm or storm, rain or shine

whether (conjunction): if, in case

## Words Frequently Misspelled

(Here spelled correctly)

abbreviate	annul	bleach	commissary	cyclone
abeyance	'annulment	bonnet	commission	cygnet
abolition	anomaly	bouillon	committee	cylinder
abridge	anonymous	boundaries	commodore	cylindrical
abscess	answer	bouquet	comparable	daffodil
absence	antechamber	bourgeoisie	compatible	dahlia
absorption	antediluvian	brilliant	compel	damage
abstinence	antenna	browse	compelling	dearth
abysmal	anticipate	bullion	complexion	debatable
abyss	antidote	bunion	compromise	debilitate
accede	apologize	buoyancy	concede	decadence
accelerate	apoplexy	bureaucracy	conceit	deceased
accessory	appalling	business	conceive	deceitfully
accidentally	apparatus		concomitant	deceive
acclaim	appreciation	cafeteria	conspicuous	decision
accommodate	appurtenance	callously	concurrency	defendant
accompaniment	argosy	calorie	condemn	deference
accordance	argument	candidacy	condescension	defiant
accredit	arraign	cantaloupe	connoisseur	definitely
accumulate	ascend	canteen	conscience	delegate
accuracy	ascension	capitalize	conscientious	delicacy
achieve	ascertain	captaincy	conscious	demise
acknowledge	asinine	caress	consecrate	denouement
acoustic	aspirant	carillon	consistent	descendant
acquaintance	assassinate	carriage	conspicuous	desecrate
acquiescent	assistance	carrot	conspiracy	desiccate
acquire	association	cartilage	constituency	despair
acquisitive	assurance	casualties	constituent	desperate
acquit	attendance	ceiling	consulate	despicable
acrimony	attenuate	cemetery	contaminate	despise
across	attorney	chalet	contemptible	despondent
adaptation	audible	challenge	contemptuous	detachable
addition	audience	chamols	contentious	deterrent
address	autumn	champagne	continually	development
adept	auxiliary	changeable	controversy	diabetes
adequacy	azalea	character	convalescent	diaphragm
adolescence		chauffeur	convenient	dictionary
adventitious	babyhood	chemise	convertible	diesel
advocacy	bacchanalla	cherub	cooing	different
affable	bachelor	chicory	cordially	diffident
aggravate	baggage	chief	corollary	dilapidated
aggregate	banana	chilblain	correlate	dilatory
aggressive	barbecue	chivalrous	counterfeit	dilemma
aghost	barbiturate	choosing	counterrevolution	dilettante
align	battalion	chronicle		diligent
alleged	believe	chrysanthemum	courageous	dimension
allegiance	beneficiary	cipher	courteous	dimity
allotment	benefited	circuit	court-martial	dining room
all right	benign	circumstantial	crescent	diphtheria
allure	bereave	civilize	critically	diplomacy
amateur	beseech	civilly	crochet	disappear
amenable	beverage	clumsily	croquet	disappoint
analogous	bibliography	coarsen	cruelty	disapprove
analysis	bicycle	cocoa	cunning	disastrous
annals	biennial	codicil	curriculum	discern
annihilate	bigoted	column	curatory	discipline
annually	bilious	coming	custodian	disconsolate
annuity	blasphemous	commencement	customary	



discrepancy	equally	gauze	indefatigable	legendary
discretion	equipped	genealogy	indefeasible	legitimate
disdain	erratic	genre	indefensible	leisure
disillusion	especially	ghastly	indelible	leprosy
disinter	ethereal	gibber	independence	lettuce
disparage	evanescent	giblets	indict	liable
disperse	eventually	gingham	indigenous	librarian
dissatisfaction	evidently	gizzard	indiscriminate	ligament
dissemble	evilly	globule	indispensable	likelihood
dissenter	exaggerate	government	individuality	limousine
dissimilar	exasperate	gradient	indivisible	liquor
dissipate	exceed	grammar	inexhaustible	litany
dissolve	excel	grateful	infallible	livelihood
distention	excellent	gratitude	influential	loathe
divine	exception	grievous	inimical	loneliness
dizziness	excerpt	grimace	innate	lonely
dizzy	excess	gruesome	innocuous	loosely
dogged	excessive	guaranteed	inoculate	lunacy
domain	excise	guidance	insensate	luscious
domicile	excitement		inseparable	
dormitory	excescence	haggle	insistence	mackerel
dotage	execrable	hallucination	intellectually	mackintosh
doughnut	exhaust	handkerchief	intercede	maddening
dour	exhibit	harass	interpret	maggot
duly	exhilarate	harness	interracial	maintenance
dutiable	exhort	heifer	interrupt	malaria
dutiful	exhume	height	intimidate	manacle
	existence	heresy	introvert	maniacal
earnest	exorbitant	hideous	irreconcilable	manufacturer
eavesdropper	expedient	historically	irrefutable	marmalade
ebony	experience	hoary	irresistible	massacre
eccentric	extension	homogeneous	irrespective	mayonnaise
echoes	extenuate	horoscope	irreverent	measles
echoing	extinguish	hygiene	irrigate	mediocre
ecstasy	extraordinary	hypnotic	isosceles	mediocrity
edible	extravagant	hypocrisy		mellifluous
editor	exuberant	hypocrite	jaundice	metamorphosis
effervescent	exultant	hypocritical	jealousy	meteorology
efficiency		hysterically	jeopardy	millionaire
effigy	fallacy		jockey	mimicking
effusive	fallible	idiocy	jollity	mimicry
egress	fascinate	idiosyncrasy	journeyman	miniature
eider down	fiery	idolatrous	joviality	miscellaneous
eighth	filament	illegitimacy	jovially	mischievous
elegy	financier	illegitimate	jugular	misspell
elementary	fissure	illiterate		moccasin
eligible	flaccid	illogical	kaleidoscope	mortgage
eliminate	fluorescent	imaginary	khaki	mountaineer
emanate	forcible	imbecile	kiln	mountainous
embarrassment	foreboding	imitate	kimono	mulatto
emigrant	foresee	immaculate	kindergarten	murmur
eminent	forsythia	immeasurable	knead	mysterious
emphatically	fracas	immediately	knowledge	
emulate	fragility	immorality		naphtha
enable	friar	immune	laboratory	narcissus
encourage	friend	impeccable	labyrinth	nascent
endear	frivolous	impertinent	lacquer	naturally
endorse	fugue	implement	ladle	nausea
energetic	fulsome	improvise	ladylike	nauseous
enervate	functionary	incensed	language	necessarily
ennoble	fundamentally	incessantly	laryngeal	necessitate
entail		incidentally	larynx	niece
enumerate	gabardine	incise	lascivious	niggardly
enunciation	gagged	incongruous	latitude	ninth
enviable	gamut	incorruptible	lattice	noncombatant
environment	garrulity	incredible	leaven	noticeable
equalize	gaseous	indebted	legacy	notoriety

obedience	pompous	referable	sanitarium	succeed
obesance	pontiff	referee	sassafras	success
obligate	pontificate	reference	scandalous	succor
obscene	portrait	referendum	scenario	suffrance
obsession	possessive	refraction	scentless	superintendent
obstacle	possibility	rehearsal	schedule	supervise
obstinate	potatoes	relevant	schism	supplement
occasion	practicability	religious	scintillate	suppress
occurrence	precede	reminiscence	scourge	surfeit
oddy	precedence	renaissance	scurlous	surfeltd
offensive	precedent	renounce	scythe	surprise
official	precocious	renown	secede	surveillance
ominous	predecessor	renunciation	sedentary	susceptible
omission	preferable	repellent	seesaw	syllable
oneself	prejudice	repercussion	segregate	symbolically
operator	presence	repertory	seize	symmetrical
opportunity	presumptuous	repetitious	self-reliant	symmetry
opposite	prevalent	reprieve	sensitive	syphilis
optimist	primeval	rescind	sensual	systematically
origin	privilege	resemblance	sententious	
oscillate	probably	reservation	separate	taffeta
ostentatious	proceed	reservoir	serviceable	talisman
outrageous	professor	residual	severely	tariff
oxidize	promenade	resilient	shellacking	tattooing
	pronunciation	resistance	shield	technicality
	propaganda	resonance	shriek	temperament
	propeller	respectively	siege	temperature
palatable	protein	respite	sieve	tempestuous
pamphlet	pseudonym	responsible	significance	temporary
panacea	psychoanalysis	restaurant	similar	tenacious
pantomime	psychology	resurrect	sirocco	tendon
parallel	ptomaine	retaliates	skain	tenement
parliamentary	publicly	retina	skillet	tension
paroled	pursuit	retrieve	sleigh ride	tentacle
parricide	pyramid	veille	sleight of hand	testament
participle		revelation	slimy	theirs
particularly		reverence	slovenly	thief
pastime	quadruped	reversible	sluggish	thoroughfare
patience	quandary	revolution	sluice	thousandth
pavilion	quarantine	rhapsody	smorgasbord	threshold
pedant	quarrelsome	rhetorically	so-called	thunderous
pedestal	quay	rheumatic	solder	tidiness
penicillin	querulous	rhinestone	solecism	timorous
perceive	queue	rhinoceros	soluble	tinselly
perennial	quixotic	rhododendron	solvable	titillation
peripatetic	quizzes	rhythm	somersault	tobacco
permissible	quizzical	rickety	sophisticated	toboggan
perseverance		ridiculous	souvenir	tolerant
persistent	racketeer	righteous	spacious	tomatoes
personality	ragamuffin	riotous	spatial	tonsillectomy
personnel	rallery	riveter	specimen	tonsillitis
perspiration	rapidity	rueful	spigot	toque
persuade	ravenous	rummage	sponsor	torrential
physician	realize	runaway	squalid	tortoise
pianos	really	rutabaga	stabbing	tournament
picnic	rebus		staccato	tourniquet
picnicking	recalcitrant	sabotage	statue	trachea
piecemeal	recede	sachet	stoically	tradition
pierce	receipt	sacrament	straightway	trafficking
pigsty	receive	sacrificial	strait-laced	tragically
pilgrimage	recipe	sacrilege	stubbornness	transcendent
pillory	recipient	sacrilegious	subsidize	transept
pinion	recognition	sadism	substantial	transient
piteous	recollect	saffron	subtle	transparency
playwright	recommend	salient	subtlety	transubstantia-
plebiscite	recoup	sanatorium		tion
pneumatic	recruit	sanctuary		trauma
pneumonia	redolent			tread

trek	tyrannical	untenable	virile	whooping cough
tremendous	tyranny	unwieldy	virtual	whore
trepidation	tyrant	upbraid	visibility	wield
tributary		usually	visionary	withhold
tricycle	ukulele	utensil	vitality	witticism
triennial	ulcerous	utilize	vitaly	wizard
trollop	ultimate	utopia	voluminous	wondrous
trough	unadulterated		voluntarily	wooling
trousseau	unalloyed	vaccinate		worried
truant	unanimous	vacillate	warrior	worrying
truism	uncomplimen-	vacuum	weaking	wrapper
truly	tary	valet	weasel	wreak
tuberculosis	unconscionable	vanilla	weather vane	wrestle
tumultuous	unctuous	vegetable	weighing	
turpentine	undoubtedly	vehicle	weird	yacht
tussle	unexceptionable	venereal	welcome	yield
tweezers	unguent	vengeance	whalebone	
tycoon	unparalleled	vermillion	whedle	zealous
typhoon	unprecedented	vigilance	whimsical	zoology
typical	unpredictable	vilify	whirl	zwieback
typify	unrequited	villain	wholly	

## Forms of Address

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**Abbot.** Address: The Right Reverend \_\_\_\_\_, Abbot of \_\_\_\_\_. Begin: Right Reverend and dear Father.

**Alderman.** Address: Honorable \_\_\_\_\_. Begin: Dear Sir.

**Ambassador.** Address: His Excellency, \_\_\_\_\_, Ambassador of \_\_\_\_\_ at \_\_\_\_\_. Begin: Sir; or Excellency.

**Ambassador and his wife.** Address: His Excellency, The \_\_\_\_\_ Ambassador of \_\_\_\_\_. Begin: Your Excellencies.

**Archbishop (Anglican).** Address: The Most Reverend His Grace the Lord Archbishop of \_\_\_\_\_. Begin: My Lord Archbishop; or Your Grace.

**Archbishop (Roman Catholic).** Address: The Most Reverend \_\_\_\_\_, D.D., Archbishop of \_\_\_\_\_. Begin: Your Excellency.

**Archdeacon.** Address: The Venerable The Archdeacon of \_\_\_\_\_. Begin: Venerable Sir.

**Army Officers.** Address: The Commander in Chief, Army of the U. S.; or (use officer's rank) \_\_\_\_\_. U.S.A. Begin: Sir; or My dear General \_\_\_\_\_.

**Assemblyman.** Address: The Honorable \_\_\_\_\_, Member of Assembly; or Assemblyman \_\_\_\_\_. Begin: Sir; or My dear Mr. \_\_\_\_\_.

**Assistant Secretary (Assistant to a Cabinet Officer).** Address: Honorable \_\_\_\_\_, Assistant Secretary of \_\_\_\_\_. Begin: Sir; or Dear Mr. \_\_\_\_\_.

**Associate Justice.** Address: The Honorable \_\_\_\_\_, United States Supreme Court; or Mr. Justice \_\_\_\_\_. The Supreme Court. Begin: Mr. Justice; or Dear Justice.

**Baron.** Address: The Right Honourable Lord \_\_\_\_\_; or The Lord \_\_\_\_\_. Begin: My Lord.

**Baroness.** Address: The Right Honourable the Baroness \_\_\_\_\_.; or The Lady \_\_\_\_\_. Begin: Madam.

**Baronet.** Address: Sir John \_\_\_\_\_, Bt. or Bart. Begin: Sir.

**Baronet's wife.** See Lady, below.

**Baron's wife.** See Baroness, above.

**Bishop (Anglican).** Address: The Right Reverend the Lord Bishop of \_\_\_\_\_.; or The Lord Bishop of \_\_\_\_\_. Begin: My Lord Bishop; or My Lord.

**Bishop (Methodist).** Address: Reverend Bishop \_\_\_\_\_. Begin: Dear Sir; or My dear Bishop \_\_\_\_\_.

**Bishop (Protestant Episcopal).** Address: To the Right Reverend \_\_\_\_\_, Bishop of \_\_\_\_\_. Begin: Right Reverend and Dear Sir; or Dear Bishop \_\_\_\_\_.

**Bishop (Roman Catholic).** Address: The Most Reverend \_\_\_\_\_, Bishop of \_\_\_\_\_. Begin: Your Excellency; or Most Reverend Sir.

**Cabinet Officers (U. S.).** Address: The Honorable the Secretary of State (or Labor, etc.); The Secretary of State, etc. Begin: Sir; or My dear Mr. Secretary.

**Canon.** Address: The Very Reverend Canon \_\_\_\_\_; or The Very Reverend \_\_\_\_\_, Canon of \_\_\_\_\_. Begin: Very Reverend Canon; or Dear Canon \_\_\_\_\_.

**Cardinal.** Address: His Eminence John, Cardinal \_\_\_\_\_. Begin: Your Eminence.

**Cardinal (if also an Archbishop).** Address: His Eminence \_\_\_\_\_, Cardinal \_\_\_\_\_, Archbishop of \_\_\_\_\_. Begin: Your Eminence.

**Chargé d'Affaires.** Address: The Chargé d'Affaires of \_\_\_\_\_.; or \_\_\_\_\_, Esq., Chargé d'Affaires. Begin: Dear Sir; or My dear Mr. \_\_\_\_\_.

**Chief Justice of the U. S.** Address: The Chief Justice of the U. S.; or The Chief Justice, The Supreme Court, Washington, D. C. Begin: My dear Mr. Chief Justice; or Sir.



**Clergyman.** Address: The Reverend \_\_\_\_\_; or (if doctor of divinity) The Rev. Dr. \_\_\_\_\_. Begin: Dear Sir; or Reverend Sir.

**Clerk of Senate or House.** Address: The Honorable \_\_\_\_\_, Clerk of \_\_\_\_\_. Begin: Sir; or Dear Sir.

**Commissioner of Bureau.** Address: The Honorable \_\_\_\_\_, Commissioner of the Bureau of \_\_\_\_\_. Begin: Sir; or Dear Sir.

**Congressman.** Address: Honorable James H. Smith, House of Representatives. Begin: Sir; or Dear Sir.

**Consul.** Address: To the American Consul at \_\_\_\_\_; or \_\_\_\_\_, Esq., American Consul at \_\_\_\_\_. Begin: Dear Sir.

**Countess.** Address: To the Right Honourable The Countess of \_\_\_\_\_. Begin: Madam.

**Dame.** Address: Dame \_\_\_\_\_. Begin: Madam.

**Deacon.** (Anglican and Protestant Episcopal). Address: The Reverend Deacon \_\_\_\_\_. Begin: Reverend Sir.

**Dean (Ecclesiastic).** Address: The Very Reverend the Dean of \_\_\_\_\_. Begin: Very Reverend Sir; or Sir.

**Dean, Rural (Roman Catholic Church).** Address: The Very Reverend \_\_\_\_\_, R.D., or V.F. Begin: Very Reverend Father.

**Dean of a College or Graduate School.** Address: Dean \_\_\_\_\_. Begin: Dear Sir; or Dear Dean \_\_\_\_\_.

**Divorced woman.** Address: Ordinarily use the maiden name with Mrs. Some divorced women prefer to resume the Miss.

**Doctor of Divinity.** Address: \_\_\_\_\_, D.D.; or Rev. Dr. \_\_\_\_\_. Begin: Dear Sir; or Dear Dr. \_\_\_\_\_.

**Doctor of Philosophy, Laws, Medicine, etc.** Address: \_\_\_\_\_, Ph.D. (LL.D.) (M.D.); or Dr. \_\_\_\_\_. Begin: Dear Sir; or Dear Dr. \_\_\_\_\_.

**Dowager.** See *Widow*, below.

**Duchess.** Address: Her Grace the Duchess of \_\_\_\_\_; or The Most Noble the Duchess of \_\_\_\_\_. Begin: Madam; or Your Grace.

**Duchess of the Blood Royal.** Address: Her Royal Highness The Duchess of \_\_\_\_\_. Begin: Madam; or May it please your Royal Highness.

**Duke.** Address: His Grace the Duke of \_\_\_\_\_; or The Most Noble the Duke of \_\_\_\_\_. Begin: My Lord Duke; or Your Grace.

**Duke of the Blood Royal.** Address: His Royal Highness The Duke of \_\_\_\_\_. Begin: Sir; or May it please your Royal Highness.

**Earl.** Address: The Right Honourable The Earl of \_\_\_\_\_; or The Earl of \_\_\_\_\_. Begin: My Lord.

**Earl's wife.** See *Countess*, above.

**Envoy.** Same as Minister (Diplomatic).

**Esquire.** Address: \_\_\_\_\_, Esq. Begin: Sir; or Dear Mr. \_\_\_\_\_. (Note.—Esq. is never used if the person is addressed by any other title, even Mr.)

**Governor.** Address: (In Mass. and by courtesy in some other states) His Excellency, The Governor of \_\_\_\_\_; or His Excellency \_\_\_\_\_; or (in other states of the U. S.) The Honorable the Governor of \_\_\_\_\_; or Hon. \_\_\_\_\_, Governor of \_\_\_\_\_. Begin: Sir; or Dear Sir.

**Governor-General of Canada.** Address: His Excellency The Right Honourable \_\_\_\_\_ (plus rank or title, if any). Begin: My Lord; or Sir.

**Governor-General's wife.** Address: Her Excellency \_\_\_\_\_. Begin: Madam.

**Judge (U.S.A.).** Address: The Honorable \_\_\_\_\_, U. S. District Judge. Begin: Dear Sir; or My dear Judge \_\_\_\_\_.

**King.** Address: The King's Most Excellent Majesty; or His Most Gracious Majesty, King \_\_\_\_\_. Begin: Sir; or May it please your Majesty.

**King's Counsel.** Address: To \_\_\_\_\_, Esq., K.C. Begin: Sir.

**Knight.** Address: Sir John \_\_\_\_\_ (initials of his order, if any, as K.C.B.). Begin: Sir.

**Knight's wife.** See *Lady*, below.

**Lady.** Address: Lady \_\_\_\_\_, or (if daughter of a baron or viscount) Hon. Lady \_\_\_\_\_; or (if the daughter of an earl, marquis, or duke) Lady Florence \_\_\_\_\_. Begin: Madam; or Your Ladyship.

**Lawyer.** Address: \_\_\_\_\_, Esq.; or Mr. \_\_\_\_\_, Attorney at Law. Begin: Dear Sir; or My dear Mr. \_\_\_\_\_.

**Lieutenant Governor.** Address: The Honorable \_\_\_\_\_, Lt. Governor of \_\_\_\_\_. Begin: Sir; or Dear Sir.

**Maid of Honor.** Address: The Honourable Miss \_\_\_\_\_. Begin: Madam.

**Marchioness.** Address: The Most Honourable the Marchioness of \_\_\_\_\_. Begin: Madam.

**Marquis.** Address: The Most Honourable the Marquis of \_\_\_\_\_; or The Marquis of \_\_\_\_\_. Begin: My Lord Marquis.

**Mayor (in Canadian cities and towns, and English boroughs).** Address: The Right Worshipful the Mayor of \_\_\_\_\_ (English); His Worship, The Mayor of \_\_\_\_\_ (Canadian). Begin: Sir.

**Mayor (in the U. S.).** Address: The Honorable \_\_\_\_\_, Mayor of \_\_\_\_\_; or The Mayor of the City of \_\_\_\_\_. Begin: Sir; or Dear Mr. Mayor.

**Member of Parliament (or of a Provincial Legislative Council or Legislature, etc.).** To the ordinary form of address add M.P. (or M.P.P.; or M.L.A., etc.). Begin: Sir.

**Minister (Diplomatic).** Address: The Honorable \_\_\_\_\_, Minister of \_\_\_\_\_. Begin: Sir; or My dear Mr. Minister.

**Minister (Religious).** See *Clergyman*, above.

**Moderator (Presbyterian Church).** Address: The Right Reverend \_\_\_\_\_. Begin: Right Reverend Sir.

**Monsignor.** Address: The Right Reverend Monsignor \_\_\_\_\_. Begin: Right Reverend and dear Monsignor \_\_\_\_\_.

- Mother Superior of a Sisterhood.** *Address:* The Reverend Mother Superior, Convent of \_\_\_\_\_; or Reverend Mother \_\_\_\_\_, O.S.D. (or other initials of the order). *Begin:* Reverend Mother; or Dear Madam.
- Naval Officers.** *Address:* The Admiral of the Navy of the U. S.; or Captain \_\_\_\_\_, U.S.N. *Begin:* Sir; or Dear Commander \_\_\_\_\_; but for officers below the rank of commander, Dear Mr. \_\_\_\_\_.
- Nun.** See *Sister of a Religious Order*, below.
- Papal Nuncio or Internuncio or Apostolic Delegate.** *Address:* His Excellency, The Papal Nuncio (or Internuncio or Apostolic Delegate) to \_\_\_\_\_. *Begin:* Your Excellency.
- Patriarch (Eastern Church).** *Address:* His Beatitude the Patriarch of \_\_\_\_\_; or His Beatitude the Lord \_\_\_\_\_, Patriarch of \_\_\_\_\_. *Begin:* Most Reverend Lord; or Your Beatitude.
- Pope.** *Address:* To His Holiness Pope \_\_\_\_\_. *Begin:* Most Holy Father; or Your Holiness.
- President of a College or University.** *Address:* \_\_\_\_\_, LL.D. (or if he is not an LL.D., use the initials of his highest degree), President of \_\_\_\_\_ University; or President, \_\_\_\_\_ University. If he is a clergyman, address as Reverend \_\_\_\_\_, LL.D., President of \_\_\_\_\_ University. *Begin:* Dear Sir; or Dear President \_\_\_\_\_.
- President of a Theological Seminary.** *Address:* The Rev. President \_\_\_\_\_. *Begin:* Dear Sir; or Dear President \_\_\_\_\_.
- President of State Senate.** *Address:* The Honorable \_\_\_\_\_, President of the Senate of \_\_\_\_\_. *Begin:* Sir.
- President of the Senate of the U. S.** *Address:* The Honorable, The President of the Senate of the U. S.; or The Honorable \_\_\_\_\_, President of the Senate. *Begin:* Sir.
- President of the U. S.** *Address:* The President, The White House; or His Excellency, The President of the U. S. *Begin:* Mr. President; or The President; or My dear Mr. President.
- Priest (Roman Catholic Church).** *Address:* Reverend \_\_\_\_\_, O.S.M. (or other initials of his order). *Begin:* Dear Father \_\_\_\_\_ (religious name).
- Prime Minister of Canada.** *Address:* The Right Honourable \_\_\_\_\_, P.C., Prime Minister of Canada. *Begin:* Sir.
- Prince of the Blood Royal.** *Address:* His Royal Highness Prince \_\_\_\_\_. *Begin:* Sir.
- Prince of Wales.** *Address:* His Royal Highness The Prince of Wales. *Begin:* Sir; or May it please your Royal Highness.
- Princess of the Blood Royal.** *Address:* Her Royal Highness the Princess \_\_\_\_\_ (Christian name). *Begin:* Madam.
- Privy Councillor (British Imperial).** *Address:* To the Right Honourable \_\_\_\_\_, P.C. *Begin:* Sir. Note.—If other titles are used, they should come after *The Right Honourable*; as, The Right Honourable Sir John \_\_\_\_\_.
- Privy Councillor (of Canada).** *Address:* The Honourable \_\_\_\_\_. *Begin:* Sir.
- Professor in a College or University.** *Address:* Professor \_\_\_\_\_; or \_\_\_\_\_, Ph.D. (or LL.D., M.D., etc., using only the initials of his highest degree, if the degrees are in the same field), Professor of \_\_\_\_\_. *Begin:* Dear Sir; or My dear Professor.
- Professor in a Theological Seminary.** *Address:* The Reverend Professor \_\_\_\_\_. *Begin:* Dear Sir; or Dear Professor \_\_\_\_\_.
- Queen.** *Address:* The Queen's Most Excellent Majesty; or Her Gracious Majesty, The Queen. *Begin:* Madam; or May it please your Majesty.
- Queen Mother.** *Address:* Her Gracious Majesty Queen \_\_\_\_\_. *Begin:* Madam; or May it please your Majesty.
- Rabbi.** *Address:* Rabbi \_\_\_\_\_; or The Rev. \_\_\_\_\_. *Begin:* Reverend Sir; or My dear Rabbi \_\_\_\_\_. (If he holds a doctor's degree, Dr. may be substituted for Rabbi.)
- Rector of a Religious House or of a Seminary.** *Address:* The Very Reverend \_\_\_\_\_, O.S.B. (or other initials of order), Rector, Brothers of St. Francis. *Begin:* Very Reverend and dear Father (or Brother).
- Representative.** See *Congressman*, above.
- Senator (U. S.)** *Address:* The Honorable \_\_\_\_\_, the U. S. Senate, Washington, D. C. *Begin:* Dear Sir; or My dear Senator.
- Sister of a Religious Order.** *Address:* Sister \_\_\_\_\_, (followed by the initials of the order). *Begin:* Dear Sister; or My dear Sister \_\_\_\_\_.
- Speaker of the House of Commons (Canada).** *Address:* The Honourable \_\_\_\_\_, The Speaker of the House of Commons. *Begin:* Dear Mr. Speaker.
- Speaker of the House of Representatives of the U. S.** *Address:* The Honorable \_\_\_\_\_, Speaker of the House of Representatives. *Begin:* Sir; or My dear Mr. Speaker.
- State Senator.** Like Senator (U. S.).
- Undersecretary of State (U.S.A.).** *Address:* The Undersecretary of State; or The Honorable \_\_\_\_\_, Undersecretary of State. *Begin:* Sir; or Dear Mr. \_\_\_\_\_.
- Vice-President.** *Address:* The Vice-President; or The Honorable \_\_\_\_\_, Vice-President of the U. S. *Begin:* Mr. Vice-President; or Sir.
- Viscount.** *Address:* The Right Honourable the Viscount \_\_\_\_\_; or The Viscount \_\_\_\_\_. *Begin:* My Lord.
- Viscountess.** *Address:* The Right Honourable the Viscountess \_\_\_\_\_. *Begin:* Madam.
- Widow.** *Address:* Ordinarily address by her former title; as, Mrs. John Smith, not Mrs. Mary Alice Smith, unless the latter form is preferred by the person herself.

# RECIPES of FAMOUS RESTAURANTS

*Edited by*

**Maxwell A. Kriendler**

*President, Jack & Charlie's "21"*

**Clementine Paddleford**

*Food Editor, This Week Magazine*

THE PLAN to include a recipe section in our Almanac has intrigued our editorial staff for many years. It didn't come to life until this edition because we were searching for an idea that would not follow the pattern of standard recipe books but would present something unusual. We found the answer when we hit upon the idea of collecting recipes from the famous dining places throughout the world. It's a sort of gourmet's travelogue which includes the masterpieces of the world's great kitchens from Milwaukee to Madrid.

To the best of our knowledge, such recipes of world-famous restaurants have never before been available in one volume. We enlisted two outstanding food experts—Mr. Maxwell Kriendler and Miss Clementine Paddleford—as our mentors.

Maxwell Kriendler is president of Jack & Charlie's "21," which is universally considered the outstanding institution of its kind, famous for its food, its clientele and its superb management. Mr. Kriendler is more than a restaurateur. He has been host to famous people from all over the world. He is on intimate terms with the owners of the finest hotels and restaurants in Europe. It was because of this that we asked him to select our European restaurants and their recipes.

For the United States, we logically turned to Miss Clementine Paddleford,

food editor for the *New York Herald Tribune* and *This Week* magazine. Miss Paddleford is no rocking-chair food expert. She has done it with knife and fork in hand, zig-zagging the U. S. Last year, for instance, she traveled 50,000 miles visiting restaurants in major cities, not only the glamour spots but out-of-the-way places.

Miss Paddleford is as enthusiastic about Poppy's hot rolls, which she found in Memphis, Tennessee, as she is about the wonderful Lobster Savannah from Locke-Ober's in Boston or a famous sauce from the Pump Room in Chicago or Grenadine of Beef from Chasen's celebrated restaurant in Hollywood.

All the recipes selected by Miss Paddleford from the U. S. and Mr. Kriendler from Europe have been set down in a form that can be followed by any housewife who is adventurous with a mixing bowl and skillet.

The list of restaurants represented in this section include the finest of the world. Many people have visited them in their travels—more have not. That is why we thought it would be a good idea to open the doors of these restaurants to you by bringing their famous recipes into your home.

Have fun as you eat your way around the world. Bon appétit!—*The Editor.*



## RESTAURANTS OF THE U. S.

### Curried Cream of Chicken Soup

("21," New York)

- |                          |  |
|--------------------------|--|
| 2 tablespoons butter     | 1 cup cream                              |
| 2 tablespoons flour      | 2 tablespoons chicken breast, finely cut |
| 2 teaspoons curry powder | Salt and pepper                          |
| 3 cups chicken stock     | 2 teaspoons chives, minced               |

Melt butter, add flour and curry powder and stir until well blended. Slowly add chicken stock, bring to a boil and simmer, stirring occasionally until mixture thickens. Add cream and cook until heated through. Do not allow to boil. Stir in chicken and chill. Season to taste. Serve each cup of soup garnished with one-half teaspoon chives. Approximate yield: one quart.

### Scallopine of Veal al Marsala

(Sardi's, New York)

- |                          |                                       |
|--------------------------|---------------------------------------|
| 2 pounds veal cutlet     | $\frac{1}{2}$ cup broth or water      |
| Salt and pepper          | $\frac{1}{2}$ glass Marsala or medium |
| $\frac{1}{2}$ cup flour  | Sherry wine                           |
| $\frac{1}{2}$ cup butter |                                       |

Cut veal in small slices, pound very thin (about 6 inches square) and sprinkle pepper and salt on both sides. Dip lightly in flour. Put butter in large frying pan. As soon as it sizzles, lay each slice of veal individually in pan. Allow to brown on both sides. Add broth, and allow to cook for 3 minutes. Add Marsala and cook one more minute on high heat. Serve. Yield: 6 to 8 portions.

### Chicken in Pineapple

(Trader Vic's, San Francisco)

- |  |                                  |
|--|----------------------------------|
| $\frac{1}{2}$ cup curry sauce              | 1 teaspoon chopped onion         |
| $\frac{1}{2}$ cup medium white sauce       | $\frac{1}{2}$ teaspoon A-1 Sauce |
| 1 cup chicken meat, coarsely diced         | Salt                             |
| $\frac{1}{2}$ cup hard cooked egg, chopped | Dash monosodium glutamate        |
| 2 teaspoons crushed pineapple              | Whipped cream                    |
| 1 teaspoon chopped green pepper            | Duchess potatoes                 |

Combine all ingredients except cream and potatoes; let simmer slowly over heat 20 minutes. Serve in halves of hollowed pineapple shells, green spike left on. Cover with whipped cream and broil until lightly browned. Border edge of pineapple with Duchess potatoes. Yield: 2 portions. Note: Mixture may be placed in casserole, topped with cream and broiled.

### Poached Columbia River Salmon Bordelaise

(Chasen's, Hollywood)

- |                               |                            |
|-------------------------------|----------------------------|
| 1 10-pound fresh salmon       | 1 sprig fresh tarragon     |
| 4 tablespoons butter, melted  | 1 bay leaf                 |
| 4 shallots, chopped fine      | 3 cups Burgundy wine       |
| 1 clove garlic, chopped       | Salt and pepper            |
| 2 tablespoons chopped parsley | 2 cups brown gravy         |
|                               | $\frac{1}{4}$ pound butter |

Fillet the salmon, cutting four steaks from each fillet. Add to butter in sauté pan, along with shallots, garlic, parsley, tarragon, bay leaf, wine, salt and pepper. Let poach very slowly for 10 minutes; remove salmon steaks from pan; keep warm. Let the stock reduce to about one pint; strain, return to pan. Add gravy and boil for 2 minutes. Take off heat. Slowly stir in butter. (Do not put back on heat.) Pour sauce on top of salmon steak. Sprinkle with chopped parsley and serve. Yield: 8 large portions.

### Hollandaise Sauce

(Antoine's, New Orleans)

- |                                |                              |
|--------------------------------|------------------------------|
| 1 cup clarified butter         | 1 tablespoon minced onion    |
| 2 tablespoons tarragon vinegar | 3 peppercorns                |
| 1 tablespoon water             | 4 egg yolks                  |
|                                | Juice of $\frac{1}{4}$ lemon |

To clarify butter: slowly melt butter, let stand until clear part can be skimmed off easily. In saucepan place vinegar, water, onion and peppercorns. Cook over very low heat to reduce liquid to one teaspoon. Remove peppercorns. Cool. Add egg yolks; beat slightly. Gradually add melted butter, beating constantly. Add lemon juice. Serve immediately. Yield: 4 portions.

### Caesar Salad

(Gourmet Room, Terrace Plaza Hotel, Cincinnati)

Salt	4 drops Worcestershire
1 clove garlic, cut in half	Black pepper to taste
3 heads washed and dried romaine	3 tablespoons grated Parmesan cheese
5 fillets of anchovies, reduced to paste	1 2-minute cooked egg
4 tablespoons garlic flavored oil	Juice of 2 lemons
	2 slices white sandwich bread

Sprinkle salt with a generous hand over inside of wooden bowl. Rub well with cut clove of garlic. Break romaine into 2-inch pieces and drop in bowl. Add anchovies to greens with garlic flavored oil and toss well. Add Worcestershire, pepper and Parmesan. Toss. Break egg over greens, squeeze lemon juice directly over egg. Toss salad lightly and thoroughly. Remove crust from bread and cut each slice into 16 cubes; fry golden in oil well scented with garlic. Drop into salad; toss again and serve. This provides 4 large portions if used as main dish, 6 portions as a first course salad.

### Sauerbraten

(Mader's, Milwaukee)

4 pounds beef round, chuck or sirloin	2½ tablespoons flour
1½ tablespoons salt	2 tablespoons granulated sugar
1 onion, sliced	5 to 6 small gingersnaps, crushed
10 peppercorns	Salt and pepper to taste
3 bay leaves	½ cup red wine
3 cloves	Sweet or sour cream
1 cup vinegar	
½ pound unsmoked bacon	
2 tablespoons drippings or lard	

Wipe meat with damp cloth and trim off gristle; rub with salt, place in earthenware crock or a glass bowl. Pour over a pickling brine made with the onions, spices, vinegar and enough water to cover meat. Allow to marinate 48 hours, turning the meat twice daily. Remove meat from liquid reserving 2 cups of brine. Cut bacon into strips one-third inch thick and 2½ to four inches

long. Pierce meat with a pointed knife and insert bacon. Heat drippings in skillet and lightly brown meat on all sides. Remove from skillet and place in roasting pan. Prepare the following sauce. Brown flour in the skillet with the drippings, add sugar, gingersnaps, salt and pepper to taste and 2 cups brine; boil until smooth and creamy. Pour over the meat and roast in a 400° F. oven, allowing 20 to 30 minutes per pound. Baste frequently during the roasting. Add the red wine ½ hour before end of roasting time. Strain gravy; if too thick or sour, add water, or, if not sour enough, add vinegar to taste. Sweet or sour cream may be added to gravy before serving. Yield: 8 portions.

### Chicken Mascotte

("21," New York)

1 chicken about 2½ pounds, quartered	3 ozs. of white wine
Salt and pepper to taste	2 cooked artichoke hearts, quartered
4 tablespoons butter	4 or 5 mushrooms, quartered

Season chicken. Place in hot butter in a pan and brown on both sides (about 20 minutes). Add wine, artichokes and mushrooms. Simmer 8 to 9 minutes until mushrooms are done. Serve with sautéed potatoes. Serves 2.

### Pompano en Papillote

(Antoine's, New Orleans)

3 medium sized pompano	½ clove garlic, minced
3 cups water	8 chopped onions, (1½ cups)
1 chopped shallot, or 2 tablespoons chopped onion	Pinch thyme
6 tablespoons butter	1 bay leaf
2¼ cups white wine	2 cups fish stock
1 cup crabmeat	2 tablespoons flour
1 cup diced cooked shrimp	2 egg yolks
	Salt
	Pepper

Clean pompano; cut into six fillets, removing head and backbone. Combine head, bones and water; simmer until there are 2 cups stock. Sauté shallot and fillets in

2 tablespoons butter; add 2 cups wine. Cover; simmer gently until fillets are tender, about 5 to 8 minutes. Sauté crabmeat, shrimp and  $\frac{1}{4}$  garlic clove in 1 tablespoon butter. Add onion, remaining  $\frac{1}{4}$  garlic clove; cook 10 minutes. Add thyme, bay leaf and  $1\frac{1}{4}$  cups of the fish stock; simmer 10 minutes. Blend together 2 tablespoons butter and flour, gradually add remaining  $\frac{1}{4}$  cup fish stock. Add to crabmeat mixture with wine stock drained from fillets. Cook, stirring constantly, until thickened. Beat egg yolks; add hot sauce and  $\frac{1}{4}$  cup wine. Mix thoroughly. Place in refrigerator to chill until firm. Cut six parchment-paper hearts 8 inches long, 12 inches wide. Oil well, place spoonfuls of sauce on one side of heart; lay poached fillet on sauce; fold over. Hand-seal edges. Lay sealed heart on an oiled baking sheet. Bake in 450° F. oven 15 minutes, or until paper hearts are browned. Serve immediately in paper. Yield: 6 portions.

Note: Fresh salmon, sea trout or striped bass may be used in this recipe instead of pompano.

### Wild Rice Stuffing

(Pump Room, Chicago)

1 cup wild rice	$\frac{1}{2}$ pound fresh
1 teaspoon salt	mushrooms,
4 cups boiling water	chopped
	3 tablespoons
2 egg yolks	butter or mar-
$\frac{1}{4}$ cup Sherry wine	garline
1 pound chicken	1 tablespoon flour
livers, cut into	$\frac{1}{2}$ cup chicken
small squares	stock
2 medium-sized	Salt to taste
onions, minced	

Wash rice thoroughly. Add salt to boiling water, then add rice slowly so water continues to boil. Do not stir; shake pot to prevent rice from sticking. Cook until tender, about 25 to 45 minutes. Beat egg yolks with Sherry and add. Fry chicken livers in small amount of fat until done and add to rice. In separate pan sauté onions and mushrooms in butter. Add flour blend; add chicken stock and bring to boil, stirring constantly. Add to rice mixture with salt. Cut squabs down back; remove

all bones and stuff. Yield:  $5\frac{1}{2}$  cups stuffing (enough for 4 small pigeons) or 4 portions.

### Edelweiss Torte

(Swiss Chalet, Bismark Hotel,  
Chicago)

Prepare puff paste from a recipe using 2 cups of flour. Divide dough into 3 parts and roll each piece into a 10-inch round; prick with a fork. Bake at 450° F. for 10 minutes; reduce heat to 350° F. and bake about 10 minutes longer, or until browned. Cool. Spread Pastry Cream on bottom layer of puff paste. Add another layer of puff paste and spread with 2 cups sweetened whipped cream. Cover with third layer of puff paste and pour Icing over top and sides. Let cake dry. Decorate with edelweiss flowers made from Butter Cream Frosting. Yield: 8 to 10 portions.

#### Pastry Cream

2 cups milk	$\frac{1}{4}$ teaspoon vanilla
2 tablespoons	extract
butter	2 tablespoons
$\frac{1}{2}$ cup sugar	cornstarch
Pinch of salt	3 egg yolks,
	slightly
	beaten

Bring  $1\frac{1}{2}$  cups milk to boiling. Stir in butter, sugar, salt and vanilla. Mix remaining milk with cornstarch; add egg yolks and pour into boiling milk, stirring constantly. Cook until thick, stirring constantly. Chill.

#### Icing

12 tablespoons	1 drop red color-
confectioners'	ing
sugar	1 drop yellow col-
2 tablespoons wa-	ing
ter	

Mix all of the ingredients to make a smooth paste.

#### Butter Cream Frosting (for edelweiss flowers)

$\frac{1}{4}$ cup butter	9 tablespoons
2 tablespoons	confectioners'
shortening	sugar
	2 drops vanilla
	extract

Cream ingredients thoroughly until well blended. Place in pastry bag.



### Pappy's Southern Rolls

(Pappy & Jimmie's Lobster Shack, Memphis)

- |  |  |
|--|--|
| 1 yeast cake or<br>one envelope of<br>granular yeast | $\frac{1}{3}$ cup milk (room<br>temperature) |
| $\frac{1}{3}$ cup lukewarm<br>water                  | 1 tablespoon su-<br>gar                      |
| 3 eggs   | 1 teaspoon salt                              |
| $\frac{1}{2}$ cup shortening,<br>melted              | 3 cups sifted all-<br>purpose flour          |
|  | $\frac{1}{4}$ pound butter or<br>margarine   |

Dissolve yeast in water for 10 minutes. Drop eggs into mixing bowl, add melted shortening, milk, dissolved yeast, sugar and salt. Beat well and begin working in the flour. Knead continuously in the bowl until it's a good dough, smooth and elastic. Cover and let rise in warm place 45 minutes or until double in bulk. Punch down dough. Cut off small pieces about the size of a walnut. Place in greased muffin pans. Let rise in a warm place until roll is high as the pan. Then bake in a hot oven (400° F.) for 8 to 12 minutes. Hot from the oven brush over butter or margarine to give extra flavor. Yield: 2 dozen rolls.

### Lindy's Cheesecake

(Lindy's, New York)

- |  |   |
|--|---|
| 2 $\frac{1}{2}$ pounds cream<br>cheese | Pinch of vanilla<br>bean (inside<br>pulp) or $\frac{1}{4}$<br>teaspoon va-<br>nilla extract |
| 1 $\frac{3}{4}$ cups sugar             |   |
| 3 tablespoons<br>flour                 |   |
| 1 $\frac{1}{2}$ teaspoons              | 5 eggs  |
| grated orange<br>rind                  | 2 egg yolks   |
| 1 $\frac{1}{2}$ teaspoons              | $\frac{1}{4}$ cup heavy<br>cream  |
| grated lemon<br>rind                   |   |

Combine cheese, sugar, flour, grated orange and lemon rind, and vanilla. Add eggs and egg yolks, one at a time, stirring lightly after each addition. Stir in cream.

### Cookie Dough Mixture

- |                                    |                                     |
|------------------------------------|-------------------------------------|
| 1 cup sifted all-<br>purpose flour | Pinch vanilla bean<br>(inside pulp) |
| $\frac{1}{4}$ cup sugar            | 1 egg yolk                          |
| 1 teaspoon grated<br>lemon rind    | $\frac{1}{2}$ cup butter            |

Combine flour, sugar, lemon rind and vanilla. Make a well in center and add egg yolk and butter. Work together quickly with hands until well bended. Wrap in wax paper and chill thoroughly in refrigerator, about one hour. Roll out  $\frac{1}{4}$  inch

thick and place over oiled bottom of 9-inch spring-form cake pan. Trim off the dough by running a rolling pin over sharp edge. Bake in hot oven (400° F.) 20 minutes or until a light gold. Cool. Butter sides of cake form and place over base. Roll remaining dough  $\frac{1}{8}$  inch thick and cut to fit the sides of the oiled band. Fill form with cheese mixture and bake in very hot oven (550° F.) 12 to 15 minutes. Reduce temperature to slow (200° F.) and continue baking one hour. Let the cake cool for at least two hours before cutting. Yield: 12 portions.

**Cherry Cheese Pie:** Using pie pastry roll it out  $\frac{1}{8}$  inch thick and line an 11-inch oiled pan. Bake in a hot oven (400° F.) 20 minutes. Add half cheese filling recipe, bake 10 to 12 minutes longer at 450° F. Remove pie from oven and when cold add fruit mixture made by combining 2 cups of sour cherries with  $\frac{1}{2}$  cup of sugar, a pinch of cinnamon and  $\frac{1}{2}$  teaspoon lemon juice. Bring fruit to boil and add 2 teaspoons of cornstarch blended with 2 tablespoons of cherry syrup. Again bring to a boil and immediately remove from heat. Cool. Cover pie with strips of the pastry laid lattice-wise and into a very hot oven (555° F.) for 10 minutes or until the strips are brown. Yield: 10 servings.

### Shrimp Clemenceau

(Brennan's, New Orleans)

- |                             |                    |
|-----------------------------|--------------------|
| 2 pounds fresh<br>shrimp    | enne pepper        |
| 2 quarts boiling<br>water   | 2 tablespoons salt |
| $\frac{1}{2}$ teaspoon cay- | 2 bay leaves       |
|                             | 1 sprig of thyme   |
|                             | 6 to 8 pepper pods |

Drop shrimp into seasoned boiling water and let come to a rolling boil; cook for 5 minutes. Drain, peel and de-vein shrimp.

### Sauce

- |                                    |                                    |
|------------------------------------|------------------------------------|
| 2 large potatoes,<br>diced         | 4 cloves garlic,<br>chopped fine   |
| 8 large mushrooms,<br>sliced       | 2 tablespoons but-<br>ter          |
| 2 sprigs finely<br>chopped parsley | 8 to 10 ounces<br>small green peas |

Deep fry potatoes. Sauté shrimp, mushrooms, parsley and potatoes together in garlic butter. When ready to serve add green peas. Yield: 8 to 10 portions.

### Shashlick Caucasian

(Old Warsaw, Dallas)

4 pounds boneless young lamb (leg or loin)	1 leaf laurel
Juice of 3 small lemons	$\frac{1}{2}$ teaspoon salt
1 cup olive oil	16 bacon strips, cut in fourths
Few grains black pepper	10-12 medium onions, cut in $\frac{1}{4}$ -inch slices
	Boiled rice

Cut lamb into one-inch pieces. Combine lemon juice, oil, pepper, laurel and salt and pour over meat in a stone crock. Cover. Keep in cool place for two days stirring occasionally. Lace meat chunks on long skewers alternately with onion slices and bacon folded in half. Broil over charcoal or under a broiler. Serve on bed of hot rice. Yield: 8 portions.

### Rognons de Veau a la Liégeoise

(Brussels, New York)

2 small veal kidneys	2 tablespoons crushed juniper berries
Salt and pepper to taste	3 tablespoons melted meat glaze
2 tablespoons butter	Chopped parsley
1 small wine glass, burned gin	

Trim kidneys leaving a slight coating of fat all around them and slice in two or three. Season with salt and pepper. Toss in butter over a high heat until kidneys are brown on both sides; transfer to a casserole. Swirl into the saucepan gin, berries and meat glaze; heat. Pour over kidneys. Sprinkle with chopped parsley. Serve very hot in casserole. Yield: 1 portion.

### Black Bean Soup With Red Wine and Frankfurters

(Menger Hotel, San Antonio)

1 pound black beans	2 teaspoons salt
3 medium sized potatoes, diced	$\frac{1}{4}$ teaspoon pepper
$\frac{1}{4}$ cup diced celery	2 garlic cloves, chopped
1 medium-sized onion, chopped	$\frac{1}{2}$ pound frankfurters, diced
2 small carrots, chopped	1 pint Burgundy
	Tabasco to taste

Pick over beans carefully and wash; soak overnight. The following morning wash again and cook in just enough water to

cover, for  $1\frac{1}{2}$  hours. Add vegetables, seasonings and garlic. Add water to cover and cook until vegetables and beans are tender. Put through sieve. Add frankfurters, wine and Tabasco. Simmer until frankfurters are heated through. Yield: 6 to 8 portions.

### Sweetbreads

(Flame Restaurant, Phoenix)

4 pairs sweetbreads	$\frac{1}{4}$ teaspoon pepper
2 quarts water	$\frac{1}{2}$ cup butter or margarine
2 teaspoons salt	1 cup fresh mushroom buttons
2 tablespoons vinegar	1 cup Sherry wine
1 bay leaf	$\frac{1}{2}$ cup stock or consommé
Pinch of rosemary	8 thin slices Virginia ham
Pinch of thyme	
$\frac{1}{4}$ cup flour	
1 teaspoon salt	

Cover sweetbreads with water, adding salt, vinegar and herbs. Bring to a boil and simmer 20 minutes; drain and cover with cold water. When cool, remove membrane and split sweetbreads in half. Dredge in flour seasoned with salt and pepper. Heat butter in skillet, add sweetbreads, mushrooms and fry until golden. Add sherry and stock; cover and cook 30 minutes. Place thin slice of ham on toast; add sweetbreads and sauce. Yield: 8 portions.

### Bigarade Sauce

(Pump Room, Chicago)

3 cups thin brown drippings from roasting pan	3 oranges
1 cup currant jelly	2 lemons
	1 jigger Burgundy
	1 jigger Madeira
	$\frac{1}{2}$ jigger Cointreau

Mix drippings with jelly and simmer slowly for  $1\frac{1}{2}$  hours. If necessary skim from time to time. Peel rind from oranges and lemons without disturbing white pulp. Cut into fine strips; squeeze juice of fruit into separate pan; add strips. Simmer 15 to 20 minutes. Add fruit juice, strips, wines and Cointreau to beef-jelly mixture and simmer 10 minutes. Strain through fine cheesecloth. Dip slices of bird into sauce prior to serving. Approximate yield: 2 cups sauce. Note: 2 cans condensed bouillon plus enough water to make 3 cups can be substituted for drippings.

## Haigayan Kebab

(Omar Khayyam's, San Francisco)

- |  |                             |
|--|-----------------------------|
| 4 squares parchment paper                    | 1 medium onion, quartered   |
| 2 pounds lamb shoulder, cut into four pieces | 1 small eggplant, quartered |
| 2 green peppers, halved                      | 1 potato, quartered         |
| 2 tomatoes, halved                           | Salt and pepper to taste    |

Place in center of each square of paper one piece of lamb, half a pepper, half a tomato, one-fourth onion, one-fourth eggplant, one-fourth potato, salt and pepper. Wrap each unit into a compact package and place side by side in a roasting pan. Bake in a 350° F. oven 2½ to 3 hours. Do not turn packages; do not use water, as there will be enough moisture in the vegetables to make a delicious natural gravy. To serve, leave in the individual packages. The aroma, as the meat is unwrapped, is a great stimulant to appetite. Guests are intrigued, wondering what in tunket waits inside. Let it be a surprise! Yield: 4 portions.

## Green Goddess Dressing

(Palace Hotel, San Francisco)

- |                               |                             |
|-------------------------------|-----------------------------|
| 1 clove garlic                | 1 teaspoon                  |
| 4 anchovy fillets, finely cut | chopped tarragon            |
| 2 tablespoons chopped onion   | 2 teaspoons chopped chives  |
| 1 teaspoon chopped parsley    | 1 teaspoon tarragon vinegar |
|                               | 1½ cups mayonnaise          |

Cut garlic clove in half; rub cut sides over salad bowl. Add anchovy, onion, parsley, chopped tarragon, chives and vinegar. Add mayonnaise; gently mix until thoroughly blended. Yield: 1¼ cups. Serve over romaine, escarole and chicory.

## Congressional Apple Pie

(U.S. Congress dining room, Washington, D. C.)

- |                                |                          |
|--------------------------------|--------------------------|
| 1 standard recipe plain pastry | ½ teaspoon cinnamon      |
| 8 large tart apples            | ¾ teaspoon salt          |
| ½ cup sugar                    | 1 tablespoon lemon juice |
| ¼ cup brown sugar or honey     | 1 tablespoon margarine   |

Line a 9-inch pie plate with pastry. Peel apples, thinly slice. Combine the sugars

(or sugar and honey) with cinnamon, salt and lemon juice. Add fruit and toss lightly to mix. Arrange in pastry-lined plate. Dot with margarine. Moisten edges of crust and cover with top crust which is then gashed to allow escape of steam. Fold upper crust under lower crust and seal edges with fork. Bake in a very hot oven (450° F.) 10 minutes; reduce heat to 350° F. and bake 40 to 50 minutes longer, or until apples are tender. Yield: 6 portions.

## Steak and Kidney Pudding

(Colony, New York)

- |                         |                       |
|-------------------------|-----------------------|
| ½ lb. chopped suet      | 1 veal kidney, cubed  |
| 3 cups flour            | 2 teaspoons salt      |
| 1½ tablespoons salt     | ¼ teaspoon pepper     |
| 1¼ cup water            | ½ teaspoon nutmeg     |
| 3 lbs. lean beef, cubed | 2 tablespoons onion   |
| 1 beef kidney, cubed    | 2 tablespoons parsley |

Put suet through fine blade of meat chopper. Combine flour, suet and salt; add water to hold ingredients together. Roll ¾ pastry as thin as possible and line 3-quart casserole, moistening edge with water. Trim excess fat off meat and kidneys and place in casserole. Season with salt and pepper. Add nutmeg, onion and parsley. Roll out remaining pastry, place over meat, Trim edges and pinch edges together. Wrap casserole in cloth; set on rack in kettle; add boiling water to come one-half way up side of casserole. Boil slowly 5 hours, adding more water as needed. Yield: 8 to 10 servings.

## Grand Central Oyster Bar Stew

(Family Style)

(New York)

- |                                    |                        |
|------------------------------------|------------------------|
| 28 oysters                         | ½ teaspoon celery salt |
| 1 cup oyster juice                 | 1 teaspoon paprika     |
| 6 tablespoons butter or margarine  | 1 cup light cream      |
| 2 tablespoons Worcestershire sauce | 1 pint milk            |
|                                    | Salt to taste          |

Pick over oysters removing bits of shell. Reserve liquid. Put four tablespoons butter or margarine into saucepan. Add Worcestershire, celery salt and paprika.



Add oysters; bring to a simmer; add oyster juice, bring to a boil. Add milk and cream. Stir once or twice. Bring almost to a boil; salt to taste and turn into bowls. Add to each portion  $\frac{1}{2}$  tablespoon butter or margarine. Yield: 4 servings.

### Crabmeat Tetrazzini

(Cape Cod Room, Hotel Drake, Chicago)

4 shallots, chopped	$\frac{1}{2}$ cup heavy cream
$\frac{3}{4}$ cup butter	Salt and pepper
2 pounds lump crabmeat	2 pounds spa- ghetti, cooked
Pinch of paprika	3 ounces Parme- san cheese, grated
$\frac{1}{2}$ cup Sherry wine	
Cream sauce (see below)	

Simmer shallots in butter for 3 minutes. Add crabmeat and paprika. Flame with Sherry wine. Add cream sauce and cream. Season to taste. Bring to a boil and remove from heat. Serve with buttered spaghetti on side dish; sprinkle with cheese. Yield: 8 to 10 portions.

#### Cream Sauce

6 tablespoons but- ter	2 cups hot milk
6 tablespoons flour	Salt and pepper

Melt butter in saucepan and stir in flour to make a smooth paste. Add milk gradually and stir constantly until smooth and thickened. Season to taste. Simmer and stir for 15 minutes.

### Old-Fashioned Pound Cake

(Sautter's, Philadelphia)

1 pound butter	1 tablespoon va- nilla extract
1 pound sugar	2 teaspoons orange extract
1 pound shelled eggs, separated (about 10 eggs)	1 pound all-pur- pose flour, sifted

Cream butter and beat in sugar gradually. Cream together well. Add the egg yolks bit by bit and continue beating until thoroughly blended. Add flavorings; lightly fold in flour. Beat egg whites until just barely stiff; fold in, oh so gently. Pour into two loaf pans (8 x 4 x 3) lined with heavy waxed paper and buttered. Bake  $1\frac{1}{2}$  hours in a 325° F. oven.

### Grenadine of Beef, Béarnaise

(Chasen's, Hollywood)

1 whole 8-pound beef tenderloin (fat and sin- ews removed)	2 tablespoons flour
24 3 by $\frac{1}{2}$ -inch strips of salt pork	$\frac{1}{2}$ cup Sherry wine
Salt and pepper	1 cup water or stock
$1\frac{1}{2}$ cups flour	$\frac{1}{2}$ cup Béarnaise sauce (See p. 73.)
$\frac{1}{2}$ cup butter	

Cut beef tenderloin into 24 slices. Pound slices to  $\frac{1}{4}$ -inch thickness. Insert a strip of salt pork in each piece of tenderloin. Season with salt and pepper; dip in  $1\frac{1}{2}$  cups flour. Sauté in butter to desired doneness; remove from pan and keep warm. Add 2 tablespoons of flour in pan, let brown. Add wine and water or stock; heat. Pour sauce into platter; arrange the grenadines of beef interlocking. Put Béarnaise sauce on each slice of beef. Yield: 12 portions.

### Omelet Espagnole

(Antoine's, New Orleans)

1 No. 2 can to- matoes	6 chopped shal- lots, or $\frac{1}{2}$ cup minced onion
3 tablespoons butter	5 tablespoons chopped green pepper
1 teaspoon salt	$\frac{1}{2}$ cup white wine
Few grains pepper	$\frac{1}{2}$ cup canned button mush- rooms
Few grains Cay- enne	$\frac{1}{2}$ cup cooked peas
1 sprig thyme	4 eggs
1 tablespoon minced parsley	1 tablespoon olive oil
1 bay leaf	
2 cloves garlic, minced	
1 tablespoon flour	

Combine tomatoes and 1 tablespoon butter; simmer ten minutes stirring occasionally. Add salt, pepper and Cayenne; cook 10 minutes. Add thyme, parsley, bay leaf and garlic. Cook 15 minutes, or until sauce is thick. Melt one tablespoon butter, blend in flour; cook until brown. Add shallots, green pepper, brown slightly. Add wine stirring constantly until slightly thickened. Add mushrooms and peas. Beat eggs until well blended; add tomato mixture. Heat remaining butter and olive oil in skillet, pour in egg mixture. Shake skillet until eggs begin to set, lifting edges of omelet

to allow uncooked mixture to flow under omelet. When cooked fold over. If desired, garnish with chopped parsley. Yield: 4 portions.

### Mincemeat Muffins

(Camelback Inn, Phoenix)

- |                               |                                 |
|-------------------------------|---------------------------------|
| $\frac{1}{2}$ cup shortening  | 2 cups sifted all-purpose flour |
| $\frac{1}{3}$ cup sugar       | 1 tablespoon                    |
| $1\frac{1}{2}$ teaspoons salt | baking powder                   |
| 1 egg, beaten                 | $\frac{1}{2}$ cup mincemeat     |
| 1 cup milk                    |                                 |

Cream together shortening, sugar and salt. Combine egg and milk; add to creamed mixture. Mix in sifted flour and baking powder. Fold in mincemeat. Pour into greased muffin pans. Bake at 400° F. for 20 to 25 minutes. Approximate yield: 1 dozen medium sized muffins.

### Locke-Ober's Baked Lobster Savannah (Locke-Ober's, Boston)

- |   |  |
|---|--|
| 1 3-pound live lobster  | $\frac{1}{4}$ cup diced green pepper     |
| Boiling water   | 1 red pimento, sliced                    |
| 1 tablespoon butter, melted                                   | 1 teaspoon paprika                       |
| $\frac{1}{4}$ teaspoon salt                                   | Salt and pepper to taste                 |
| 1 cup standard Newburg sauce, using 2 tablespoons Sherry wine | $\frac{1}{4}$ cup fresh bread crumbs     |
| $\frac{1}{2}$ cup chopped, fresh mushrooms                    | $\frac{1}{4}$ cup grated Parmesan cheese |
|   | Sherry wine                              |
|   | Lemon wedges                             |

Plunge lobster into boiling salted water, cover and boil for thirty minutes. Remove lobster and cool. Cut off claws and legs so that only the body is left. Hold lobster with its top side up and using kitchen shears, cut an oval opening in the top of the shell from the base of the head to the tail. Remove all the meat from the body and the claws (the legs are discarded). Cut the lobster meat in cubes and place in a buttered baking pan along with butter and salt. Bake at 375° F. for 20 minutes. Remove pan from oven and drain off accumulated liquid. Add lobster to Newburg sauce along with mushrooms and green pepper. Cook over low heat, stirring occasionally, for 15 minutes. Remove the

pan from the heat and stir in pimento and paprika. Taste and add as much salt and pepper as you like. Pile the filling into the lobster shell. Mix together bread crumbs and cheese and sprinkle over top of filling. Transfer lobster to a shallow pan. Bake at 375° F. for 15 minutes or until topping is golden brown. Remove from oven and place on hot serving dish. Sprinkle the top with several tablespoonsful Sherry. Serve with lemon wedges. Yield: 1 generous serving, or 2 medium portions.

### Arroz Con Pollo

(Columbia, Ybor City, Fla.)

- |                             |                                |
|-----------------------------|--------------------------------|
| $\frac{1}{2}$ cup oil       | 3 cups water                   |
| 1 frying chicken, quartered | 1 bay leaf                     |
| 1 onion, chopped            | 1 tablespoon salt              |
| 2 cloves garlic, minced     | Pinch of saffron               |
| 1 green pepper, chopped     | 1 cup raw rice                 |
| $\frac{3}{4}$ cup tomatoes  | 1 2-ounce can small green peas |
|                             | 2 pimentos, cut into strips    |

Heat oil in frying pan. Add chicken and brown well on both sides. Add onion, garlic and green pepper; cook 5 minutes. Add tomatoes and water; cook for 5 minutes. Stir in bay leaf, salt, saffron and rice. Cover and bake in a 350° F. oven for 20 minutes or until tender. Garnish with peas and pimentos. Yield: 4 servings.

### Crêpes Louise

(Imperial House, Chicago)

- |   |  |
|---|--|
| $\frac{1}{2}$ cup thick cream sauce         | 4 crêpes, about 5 inches                               |
| $\frac{1}{2}$ teaspoon chopped parsley      | 4 whole mushroom caps                                  |
| 1 tablespoon tarragon vinegar               | 1 tablespoon (rounded) stiffly whipped cream           |
| 1 tablespoon chopped tarragon leaves        | 1 tablespoon (heaping) Hollandaise sauce. (See p. 64.) |
| Salt and pepper to taste                    | 1 cup thin cream sauce                                 |
| $\frac{1}{2}$ teaspoon Worcestershire sauce | Grated Parmesan cheese (optional)                      |
| 1 cup fresh lump crabmeat                   |  |

Bring thick cream sauce to a boil in saucepan; add parsley, vinegar, tarragon, salt, pepper and Worcestershire. Add crabmeat, being careful not to mash it too

much. Prepare crêpes. Place spoonful of the fish mixture in center of each crepe, roll up and place in a casserole with a mushroom cap on top of each. Fold cream and Hollandaise into the thin cream sauce and pour over the pancakes. Sprinkle with grated Parmesan cheese, if desired. Brown under broiler and serve very hot. Yield: 2 portions.

### Béarnaise Sauce (Arnaud's, New Orleans)

- |                     |                            |
|---------------------|----------------------------|
| 1 cup butter        | 1 teaspoon                 |
| 4 tablespoons flour | chopped chives             |
| 2 cups hot milk     | $\frac{1}{4}$ cup capers   |
| Salt and pepper     | $\frac{1}{4}$ cup tarragon |
| 1 teaspoon          | vinegar                    |
| chopped parsley     | 2 egg yolks,               |
|                     | slightly beaten            |

Melt  $\frac{3}{4}$  cup of the butter and stir in flour to make a smooth paste. Add milk gradually and stir constantly until smooth and thickened. Season to taste. Add parsley, chives, capers and vinegar. Simmer 10 minutes, stirring occasionally. Remove from heat. Stir in egg yolks slowly along with remaining butter. Yield: about  $3\frac{1}{2}$  cups sauce.

### Brown Derby Black Bottom Pie (Brown Derby, Hollywood)

- |                                 |                                 |
|---------------------------------|---------------------------------|
| 1 envelope unflavored gelatin   | 1 cup evaporated milk, whipped* |
| $\frac{3}{4}$ cup sugar         | 1 teaspoon vanilla              |
| $\frac{1}{8}$ teaspoon salt     | 1 9-inch baked pie shell        |
| 1 egg yolk                      | 1 cup whipping cream            |
| $\frac{3}{4}$ cup milk          |                                 |
| 4 squares unsweetened chocolate |                                 |

Mix gelatin, sugar, salt, egg yolk and milk in top of double boiler; add three squares of the chocolate. Cook over hot water until chocolate is melted, stirring occasionally; remove from heat. If necessary, beat with egg beater until smooth. Chill. Fold in whipped evaporated milk and vanilla. Pile into cooled pie shell. Chill.

Whip cream, sweetened to taste, and spread over top of pie. Shave remaining chocolate into curls. Sprinkle over topping. Yield: 1 9-inch pie.

\*To whip evaporated milk pour one cup into freezer tray. Chill in freezing

compartment until tiny ice crystals form at edges (about  $\frac{1}{2}$  hour). Pour into cold bowl; whip rapidly with a cold beater until stiff.

### Canlis' Salad (Canlis', Seattle)

- |  |  |
|--|--|
| 2 tablespoons olive oil                        | $\frac{1}{4}$ cup chopped green onion              |
| Salt   | 6 tablespoons olive oil                            |
| 3 cloves garlic                                | Juice of 1 lemon                                   |
| 2 peeled tomatoes                              | $\frac{1}{2}$ teaspoon freshly ground black pepper |
| 2 heads romaine lettuce                        | 1 soft-coddled egg                                 |
| 1 pound bacon, finely chopped and fried        | 1 cup croutons                                     |
| $\frac{1}{2}$ cup freshly grated Romano cheese |  |

Pour 2 tablespoons olive oil into salad bowl. Sprinkle generously with salt. Using 3 fingers, press garlic and rub the bowl with it. (The oil will act as a lubricant and the salt as an abrasive.) Cut tomatoes into quarters or eighths and put in bottom of bowl. Cut romaine into 1-inch strips and put on top of tomatoes. (Other salad vegetables may be used but always put heavy vegetables on bottom of bowl and romaine on top.) Sprinkle bacon, cheese and onion over greens. In a separate bowl, combine 6 tablespoons olive oil, lemon juice, pepper and egg; beat well. Add dressing to greens only when ready to serve. Add croutons, toss and serve. Yield: 6 to 8 portions.

### Homard aux Aromates (Brussels, New York)

- |                                   |                                     |
|-----------------------------------|-------------------------------------|
| 3 large lobsters, split           | $\frac{1}{4}$ cup brandy            |
| $\frac{1}{4}$ cup butter          | $\frac{1}{2}$ cup white wine        |
| $\frac{1}{2}$ teaspoon thyme      | $1\frac{1}{2}$ cups fish stock      |
| 2 bay leaves                      | 1 cup heavy cream                   |
| 1 cup chopped celery              | 1 cup julienne celery, cooked       |
| $\frac{1}{4}$ cup chopped parsley | 1 cup julienne string beans, cooked |
| $\frac{1}{2}$ cup chopped onions  | 1 cup julienne carrots, cooked      |
| 1 garlic clove, chopped           |                                     |

Split lobster lengthwise, crack claws. Remove any coral; chop. Brush lobster with butter, broil 5-10 minutes. Remove lobster meat from shell. Sauté lobster in butter;



add thyme, bay leaf, celery, parsley, onion and garlic. Pour brandy and white wine over all; flame it. Add fish stock; cook 15 minutes; strain. Reduce sauce to one cup. To the stock add cream, coral, cooked vegetables and lobsters. Heat; season with salt and pepper. Yield: 4 servings.

### Trifle Pudding

(Cock 'n Bull, Los Angeles)

2 tablespoons cornstarch	¼ pound almond macaroons
2 cups milk	¼ pound ladyfin- gers
3 tablespoons sugar	½ cup raspberry jam
3 egg yolks	Whipped cream
3 tablespoons wa- ter	Maraschino cher- ries
¼ cup Sherry wine	
¼ cup Brandy	

Dissolve cornstarch in ¼ cup of the milk. Heat remaining milk in double boiler over hot water; stir in cornstarch paste. Beat together sugar, egg yolks and water; stir gradually into hot milk. Cook until thickened, about 5 minutes, stirring constantly. Cool; add Sherry and Brandy. Crumble macaroons and ladyfingers, mixing the two together. Line a 1½-quart dish with part of the jam; sprinkle with crumb mixture. Combine remaining jam, crumbs and custard sauce. Pour into crumb-lined dish. Chill for several hours or overnight. Just before serving, cover thickly with whipped cream and decorate with cherries or other fruit. Yield: 6 to 8 portions.

### Long Island Bay Scallops, Provençale

("21," New York)

1 pound scallops	3 tablespoons of stewed tomatoes
Salt and pepper to taste	2 cloves garlic
Flour for dredging	Juice of ½ lemon
1 tablespoon but- ter	Parsley to sprinkle

Season scallops with salt and pepper and dredge in flour. Brown half of butter in frying pan. Put scallops in pan and cook about 2 minutes on each side until golden brown. Place scallops on serving dish. Brown rest of butter and add finely chopped garlic. Put 1 tablespoon of stewed tomatoes on each portion of scallops. First pour lemon juice over scallops and tomatoes and then butter with garlic. Serves 2 to 3.

### Cherry Torte, Black Forest Style

(Luchow's, New York)

1 quart large black Bing cherries, washed	3 egg yolks ½ cup light cream
½ cup Kirsch	2 8-inch sponge layers, one inch thick
1½ pounds confec- tioners' sugar	1 cup finely shaved bitter- sweet chocolate
3 tablespoons cornstarch	
½ pound butter	

Remove stems and pits from cherries. Mix Kirsch and one cup sugar; pour over fruit in a bowl; let stand two hours; heat to boiling. Mix cornstarch with about 2 tablespoons cherry juice and stir into cherries. Cook and stir until thickened. Remove from heat and cool. Beat butter and remaining sugar; cream together until smooth and well blended. Beat egg yolks into this and continue beating until mixture is light and fluffy. Place layer of cake on serving plate. Make a border around edge with butter mixture and spread butter cream in circle in center of cake. Spread cooled, thickened cherry mixture over layer. Place second layer on top. Make border around edge of top layer with butter cream. Heap center with remaining cherry mixture. Coat sides with butter cream. Yield: 6 to 8 portions.

### Chicken Victoria

(Arnaud's, New Orleans)

4 chickens, 1½ pounds dressed, boned	cut in ½-inch cubes
Seasoned flour	½ pound bacon, finely chopped
½ cup butter	½ cup Sherry wine
2 medium onions, chopped	Salt and pepper
6 fresh mush- rooms, chopped	8 toast rounds
6 large potatoes,	½ cup Béarnaise sauce (See p. 73.)

Cut chickens in half. Coat with flour. Fry in butter until golden brown and partially tender. Add onions, mushrooms and potatoes. Sauté together with chicken. Add bacon and cook until chicken and potatoes are done, about 15 minutes. Add wine and heat. Season to taste with salt and pepper. Place chicken on toast round in center of plate. Arrange vegetable mixture around the chicken. Top chicken with Béarnaise sauce. Yield: 8 portions.

# Callie's Pecan Pie

(Rich's, Atlanta, Georgia)

- |                             |                             |
|-----------------------------|-----------------------------|
| 3 whole eggs                | ½ cup sugar                 |
| 2 tablespoons melted butter | 1½ cups dark corn syrup     |
| 2 tablespoons flour         | 1½ cups broken pecan halves |
| ½ teaspoon vanilla          | 1 unbaked 8-inch pie shell  |
| ⅓ teaspoon salt             |                             |

Beat eggs; blend in melted butter, flour, vanilla, salt, sugar and syrup. Sprinkle nuts over bottom of unbaked pastry shell, and more nuts, if like Callie, you are open-minded on the subject. Pour on syrup mixture and bake in a 425° F. oven 10 minutes. Reduce heat to 325° F. and bake about 40 minutes. Yield: 6 portions.

# Creole Jambalaya

(Corinne Dunbar, New Orleans)

- |  |                              |
|--|------------------------------|
| 1 onion, minced                          | 4 sprigs parsley, minced     |
| 1 clove garlic, minced                   | 2 sprigs thyme, minced       |
| 1 tablespoon flour                       | 2 cups hot water             |
| 1 tablespoon shortening                  | Salt and pepper to taste     |
| 1½ pounds raw shrimp, peeled and cleaned | 1 cup rice, boiled and dried |
| ¼ pound ham                              | 2 tablespoons butter         |
| 3 pork sausages                          | Chopped parsley              |
| 1 6-ounce can tomato paste               | Pimento strips               |

Brown onion, garlic and flour in shortening. Add shrimp, cut into medium-size pieces. Cook, stirring for several minutes, until shrimp are slightly pink. Cut ham and sausages into mouth-size pieces and fry in separate skillet until light brown. Add to shrimp with tomato paste, parsley and thyme. Stir in 2 cups hot water; season with salt and pepper. Cook until shrimp are tender and gravy is the consistency of a stew, about 1 hour. Add rice to shrimp mixture and stir well but gently to prevent mashing. Put into double boiler, add butter, cover and let steam slowly for about ½ hour, stirring carefully to prevent sticking. When rice is dry and flaky, the Jambalaya is cooked. Serve on a large platter garnished with chopped parsley and pimento strips. Yield: 8 to 10 portions.

# Cocktail Sauce

(Grand Central Oyster Bar, New York)

- |                               |                    |
|-------------------------------|--------------------|
| 1½ 14-ounce bottles ketchup   | sauce              |
| ½ 12-ounce bottle chili sauce | 1 cup horse-radish |
| 6 tablespoons Worcestershire  | Few dashes Tabasco |

Mix all ingredients well and let stand to blend flavors for one day before using. Yield: 1 quart.

# Holiday Eggnog Pie

(Camelback Inn, Phoenix)

- |                               |                            |
|-------------------------------|----------------------------|
| 1 envelope unflavored gelatin | ⅓ teaspoon nutmeg          |
| ¼ cup cold water              | ¼ teaspoon cream of tartar |
| ½ cup sugar                   | ½ cup sugar                |
| ½ teaspoon salt               | Rum flavoring              |
| ¾ cup milk                    | 1 9-inch baked pie shell   |
| ½ cup light cream             | Whipped cream              |
| 3 eggs, separated             |                            |
| 1 teaspoon vanilla            |                            |

Dissolve gelatin in cold water. Combine ½ cup sugar, salt, milk, cream and beaten egg yolks in a double boiler. Cook over hot water until mixture thickens. Add gelatin and stir until dissolved. Add vanilla and nutmeg. Pour into a bowl and place in a pan of ice cubes.

Beat egg whites and cream of tartar until foamy; gradually beat in ½ cup sugar until stiff. Fold into cooled mixture. Add rum flavoring to taste. Pour into cooled pie shell. Chill and top with whipped cream. Sprinkle with more nutmeg if desired. Approximate yield: 6 portions.

# Crab Imperial

(Chesapeake, Baltimore)

- |                              |                        |
|------------------------------|------------------------|
| 1 green pepper, finely diced | 2 eggs                 |
| 2 pimentos, finely diced     | 1 cup mayonnaise       |
| 1 tablespoon English mustard | 3 pounds lump crabmeat |
| 1 tablespoon salt            | Mayonnaise for topping |
| ½ teaspoon white pepper      | Paprika                |

Mix pepper and pimento. Add mustard, salt, pepper, eggs and mayonnaise and mix well. Add crabmeat and mix in with fingers so lumps are not broken. Divide

mixture into eight crab shells or casseroles, heaping it in lightly. Top with a light coating of mayonnaise and sprinkle with paprika. Bake at 350° F. for 15 minutes. Serve hot or cold. The traditional Baltimore garnish is a creamy cole slaw, tomato slices, crisp lettuce and French-fried potatoes. Yield: 8 portions.

### Vanilla Soufflé (Voisin, New York)

2 cups milk	1 teaspoon vanilla
3 egg yolks	extract
6 tablespoons sugar	4 egg whites, stiffly beaten
6 tablespoons flour	

Boil milk. While it is boiling, mix egg yolks and sugar. Add flour; mix well. Stir in milk and vanilla; place in a saucepan. Cook, stirring constantly, until mixture thickens and comes to a boil. Let cool

thoroughly. Fold in egg whites and pour into a soufflé dish which has been buttered and sugared on the bottom. Place in a pan of hot water. Bake at 350° F. for 50 to 60 minutes, or until firm. Serve at once with Vanilla Custard Sauce. Yield: 6 portions.

### Vanilla Custard Sauce (Voisin, New York)

4 egg yolks	1 cup boiling milk
6 tablespoons sugar	½ teaspoon vanilla or Kirsch
1 teaspoon cornstarch	to taste

Mix yolks and sugar; add cornstarch and pour in the milk. Mix thoroughly and place in a saucepan. Add vanilla. Cook stirring constantly until mixture thickens and comes to a boil. If you prefer Kirsch sauce, eliminate vanilla and add liqueur after custard has been cooked.

## FOREIGN RESTAURANTS

### Fish Soufflé (Croustade de Barbue Lagrene) (La Tour d'Argent, Paris)

2 filets of sole, about 4 ozs. each	2 eggs separated
4 ozs. white Bordeaux wine	Salt and pepper
2 cups mashed potatoes	<i>Ingredients for white sauce (Béchamel):</i>
1 tablespoon bread crumbs	2 tablespoons of melted butter
1 tablespoon melted butter	1½ tablespoons of flour
6 tablespoons grated Parmesan cheese	1 cup milk

To prepare white sauce: Add flour to 2 tablespoons of melted butter. Mix well. Bring milk to a boil and add to butter and flour mixture allowing it to cook for about 10 minutes and stirring frequently. Remove from fire.

Simmer fish in wine 8 to 10 minutes. Add 4 tablespoons of cheese, egg yolks, salt and pepper to white sauce. Mix well. Mash fish in its own stock and add to sauce. Beat egg white until stiff and fold

into the fish mixture with a wooden spoon. Place mashed potatoes in a buttered baking dish. Scoop out a hollow in the middle and pour in the fish mixture. Bring edges of potatoes up so that the mixture doesn't spill over the sides. Mix bread crumbs with remainder of cheese (2 tablespoons) and scatter over the whole thing. Sprinkle with the rest (1 tablespoon) of the melted butter. Place in a medium oven for 30 to 35 minutes.

### Beef Filet Excelsior Style (Hotel Excelsior, Rome)

1 beef filet, about 4 pounds	6 ozs. Madeira wine
¼ cup of good olive oil	½ pound each
2 ozs. foie gras	carrots, lima beans, peas, asparagus and squash
2 heads of truffle, sliced	1 pound potatoes

Slit filet lengthwise to a depth of a little over half the thickness. Fill with foie gras and truffle slices, distributing both evenly



throughout the length. Close up and tie with string. Heat oil in shallow pan and in it brown meat on both sides. When brown place in medium hot oven for 20 to 25 minutes. Cook vegetables separately. When beef is done remove to large serving platter. Discard grease from pan but do not wash.

*To prepare Madeira sauce:*

Pour 6 ozs. of Madeira wine in pan and add about 2 cups of brown gravy. Bring to a boil and strain over the beef. Garnish with vegetables. Serves 6 to 7.

### Rognons Flambés

(Alex Humbert, Paris)

3 veal kidneys, trimmed and cut cross-wise into 4 slices	1½ tablespoons butter
Salt and pepper to taste	1 teaspoon Dijon mustard
2 tablespoons butter	½ cup brown gravy
2 ozs. brandy	Chopped parsley to sprinkle

Season kidneys. Heat 2 tablespoons of butter until golden brown in saucepan. Add kidney slices and cook for 1 to 2 minutes. Pour on brandy and tip the pan so that it flames up. Put kidneys on a platter. Mix 1½ tablespoons butter with Dijon mustard. Add gravy and pour this mixture into the kidney stock. Cook on a slow fire from 5 to 6 minutes and pour over kidneys. Sprinkle with parsley and serve. Serves 3.

### Potatoes Taillevent

(Taillevent, Paris)

4 tablespoons butter	6 eggs
½ cup water	3 large potatoes, cooked or baked
½ cup milk	1 quart oil
1 cup flour	

In a large pan pour milk, water and butter and bring to a boil. Add 1 cup of flour slowly, beating constantly. Cook 4-5 minutes. Remove from fire. Add 6 eggs one by one, mixing with wooden spoon. Pass potatoes through a ricer and stir into mixture. Heat to medium hot about 1 quart of oil (deep enough to submerge potato balls). Drop in 1 tablespoon at a time by

using 2 tablespoons, one to shape the balls, the other to push off into the oil. Cook until golden brown.

### Sole au Sherry Wine

(L'Escargot, Paris)

2 filets of sole	minced mushrooms
Salt and pepper	1 egg yolk
2 ozs. Sherry	1 tablespoon cream
½ cup cream	
2 tablespoons	

Into a lightly buttered shallow pan place filets. Add salt and pepper, minced mushrooms over the top and pour in wine. Place on a slow fire, well covered, steaming for 10 minutes. In the meantime, simmer the cream until it thickens. Remove stock from fish and pour slowly into thickened cream, stirring constantly. Mix egg yolk with tablespoon of cream and add to sauce slowly. Now pour sauce over the fish and place under broiler until brown.

### Albufera Chicken

(Hotel Ritz, Madrid)

1 chicken about 2½ lbs.	either Malaga or Port
Salt and pepper to taste	1 pt. cream
A little oil or butter	Chicken liver, cooked and chopped (about 2 ozs.)
4 ozs. of wine,	

Season chicken with salt and pepper. Rub butter or oil over skin and roast either whole or in quarters slowly so that it doesn't get too brown. After about 40 or more minutes, when chicken is done, place in a serving dish, and keep warm. Heat wine in the same roasting pan for a few minutes. Add cream, simmer slowly 10 to 15 minutes. Then mix in chopped liver. Pour over chicken. This is to be served with rice prepared as follows:

½ onion, chopped fine	A few cooked peas
a little oil	1 tablespoon of chopped ham
½ cup rice	Sprinkle of chopped saffron
2 cups water	
1 whole pimento, diced	

Heat oil in pan, put in onion and let cook until golden brown. Add rice. When brown add salt and pepper. Add water, pimento. Sprinkle with peas, ham and saffron. Bring to a boil. Simmer slowly, about 20 minutes until water has been absorbed.

## Caneton Soufflé à la Châtelaine de Tourbillon

(The Dorchester, London)

1 duckling, about 5 lbs., boned	$\frac{1}{2}$ pint heavy cream
1 lb. fresh, ground pork	Salt and pepper to taste
$\frac{1}{2}$ tablespoon but- ter	4 ozs. Madiera
1 large onion, chopped fine	1 cup brown gravy
6 mushrooms, chopped	Seedless grapes and chopped walnuts
1 clove garlic, crushed	

To bone duckling, lay it breast-side down. Slit down the back and with a knife carefully cut bone away from meat. Melt butter in a skillet and simmer onion, mushrooms and garlic for 2-3 minutes. Add to pork. Stir in cream little by little until mixture becomes a paste. Stuff duck through the back so that duck retains its original shape. Sew up opening. Rub a little melted butter over skin and place in oven. Cook slowly for 1 to  $1\frac{1}{2}$  hours, basting often. When duck is done, place on a serving platter and keep hot. Discard grease but do not wash pan. Put Madiera in pan and add gravy. Simmer for 5-6 minutes and strain. Add a few grapes and walnuts. Pour over duckling.

## Spaghetti with Sea Food

(San Francisco Restaurant, Paris)

1 pound thin spa- ghetti	$\frac{1}{2}$ pound scallops
4 quarts water	$\frac{1}{2}$ pound mussels or oysters, chopped or cut in 4
1 small onion, cut fine	$\frac{1}{4}$ cup dry white wine plus 1 tablespoon
1 small clove gar- lic	1 tablespoon purée of to- mato
$\frac{1}{2}$ small carrot, cut fine	Salt and pepper to taste
1 tablespoon diced celery	Pinch powdered red pepper
2 tablespoons olive oil	
Meat of 1 lobster cut into pieces or 1 pound shrimps	

Heat oil. Add onions, garlic, carrot and celery and cook until golden brown. In the meantime, steam mussels in 1 tablespoon of white wine. Remove mussels from shells, reserving the liquid in the pot. Add lobster to cooking vegetables. After about

3 minutes add wine, tomato and seasonings. Add scallops, mussels and liquid from steaming pot. Simmer not more than 8 to 10 minutes. Serves 8 to 10.

Boil spaghetti in salted water 10 to 12 minutes. Drain well and serve with sauce.

## "The Joppe" Shrimp Salad

(Restaurant Riche, Stockholm)

8 shrimps cooked and de-veined	2 slices of toma- to
6 asparagus tips	Lettuce, shredded
1 egg, hard-cooked, quartered	

*Dressing:*

2 small mush- rooms (cooked or raw) chopped	Pinch of fresh dill, chopped
	2-3 tablespoons mayonnaise

Place bed of lettuce in center of dish. Place 3 asparagus tips at either side and a slice of tomato at the top and bottom. Put an egg quarter between each slice of tomato and asparagus. Place shrimps on the lettuce. Mix mushrooms, parsley, dill and mayonnaise together and pour on shrimp.

## Breast of Chicken Carignano Style

(Hotel Excelsior, Rome)

2 chicken breasts	4 ozs. cream
Salt and pepper to taste	1 large mushroom, quartered
2 ozs. brandy	

Cut each breast through the breastbone to make two halves. Remove breast meat from bone, keeping upper half of wing with bone. Season chicken. Melt butter in skillet and place chicken in it, skin-side down. Brown slowly. Then brown the other side. Cook mushroom in same pan for the last few minutes. When chicken is brown add brandy and simmer (covered) for 10 minutes. Remove breasts and mushroom. Pour cream into the same pan, cooking for a few minutes until it begins to thicken. Add a pat of butter agitating the pan so that it mixes. Remove from fire. Pour over the chicken breasts and serve very hot, using the mushroom to garnish.

## Tenderloin of Veal Passetto Style

(Ristorante "Passetto," Rome)

2 veal tenderloins	Little garlic juice
Salt and pepper to taste	or garlic salt
1 tablespoon butter	1 slice of cooked ham (about 1 oz.) cut into small pieces
White wine to sprinkle	1 tablespoon capers
3 mushrooms, chopped fine	1 fresh, diced, peeled tomato

Season tenderloins. Place them in hot butter in saucepan. Sprinkle with wine and cook for 10 to 15 minutes on a hot stove. Add mushrooms, garlic, ham, capers and tomato. Cook together for 10 to 15 minutes so that the meat becomes well flavored. Remove the meat and continue simmering sauce until it is only moist. Pour over the meat and serve.

## Steak Pudding

(made preferably with venison)  
(Buck's Club, London)

2 pounds venison (or beef), cut into cubes; save bones	Salt and pepper to taste
1 large onion, chopped fine	A little powdered clove
	18 oysters
	1 tablespoon butter

### Thin brown gravy:

Venison (or beef) bones	chopped
A little flour	Water
1 fresh tomato, peeled and	Salt and pepper to taste

### Crust:

¾ pound beef suet, chopped fine	1 pound plain flour
	Cold water

Brown venison (or beef) bones in a skillet, sprinkle with flour and add tomato and enough water to cover. Simmer covered for 2 to 3 hours. Strain and season. Brown venison (or beef) and onion in butter in large pan. Add salt, pepper and clove. Add gravy and simmer slowly for 5 hours. In the meantime, mix suet and flour. Add enough cold water to make a bread-like dough. Roll out and line a casserole. Be sure to reserve enough dough for the top crust. Add meat mixture and cover with top crust. Put pudding in oven and cook for 1 hour slowly so that the top crust does not burn. In the meantime, simmer

oysters in a little water about 10 minutes. When pudding is done, remove from oven, lift top crust and place oysters over the meat mixture. Replace crust and serve with:

### Hot Port wine sauce:

3 cloves	2 tablespoons red currant jelly
1 clove garlic	4 tablespoons Port wine
3 tablespoons Worcestershire sauce	
1 tablespoon thin strips orange rind	

Boil cloves, garlic, and orange rind in Worcestershire sauce. Add jelly and wine. Heat thoroughly.

## Gazpacho a la Andaluza

(Hotel Ritz, Madrid)

1 clove garlic	a little cumin
½ teaspoon of olive oil	a little red pepper
1 small cucumber with peel (center containing seeds removed)	a dash Worcestershire sauce
4 tomatoes	1 water roll (or a slice of bread) soaked in 2 cups of water
1 small green sweet pepper	1 teaspoon of wine vinegar
a pinch of salt	1 pt. light cream

Pass garlic, oil, cucumber, tomatoes and green pepper 4 or 5 times through a grinder until it becomes a paste. Add salt, pepper and Worcestershire sauce. Then add bread and water, beating with a rotary beater. Mix in wine vinegar, then cream. Serve very cold.

## Gratin of French Lobster "Georgette"

(Restaurant Lapérouse, Paris)

1 lobster, about 1½ pounds	¾ cup cream sauce (for preparation see recipe for Fish Soufflé, page 78.)
Salt and pepper to taste	Grated Parmesan cheese
4 mushrooms, cut in quarters	
1 teaspoon butter	
1 oz. brandy	

Cook lobster 8 minutes in a little seasoned water in a covered pot. Drain and remove meat from shell. In the meantime cook mushrooms over a low fire. Now add the lobster meat and about 1 teaspoon butter. Sauté 8 to 9 minutes. Add brandy and cream sauce. Bring to a simmer. Then remove from fire to platter. Sprinkle with Parmesan cheese and place under broiler or in oven until brown.



**Veal Escalope à la "Don Quijote"**

(Ristorante Horcher, Rome)

- |                                 |  |
|---------------------------------|--|
| 2 veal cutlets,<br>about 6 ozs. | ½ cup cream                                  |
| each                            | 6 orange segments<br>(without mem-<br>brane) |
| Salt and pepper to<br>taste     | 6 slices figs<br>(fresh or<br>canned)        |
| Flour for dredg-<br>ing         |  |
| 2 tablespoons<br>butter         | <i>Rice:</i>                                 |
| 1 banana                        | ½ cup rice                                   |
|                                 | 2 cups cold water                            |

**Piquant sauce:**

- |                                    |                 |
|------------------------------------|-----------------|
| Dash of sherry (or<br>lemon juice) | Salt to taste   |
|                                    | 1 pinch saffron |

Flatten veal cutlets until very thin. Season with salt and pepper and dredge in flour. Heat butter in skillet. Fry cutlets and banana, cut lengthwise, until golden brown. Place meat on serving platter with half banana on each slice. To prepare piquant sauce pour cream into saucepan, and heat until it begins to thicken. Add sherry, orange and figs, stirring constantly. Bring to a boil and pour over veal.

To cook the rice put the saffron into the water in a saucepan. Add the rice, bring to a boil. Remove from the fire. Cover and allow it to stand in a warm place on the stove or in the oven for 20 minutes, when the water should be absorbed. Serve together.

**Capon Recamier**

(Hôtel de la Côte d'Or, Saulieu)

- |   |                               |
|---|-------------------------------|
| 1 capon                                     | Few sprigs of<br>parsley      |
| Salt and pepper<br>to taste                 | 1 bay leaf                    |
| ¼ lb. butter                                | Small pinch of<br>thyme       |
| Flour to dredge                             | 6 or 7 mush-<br>rooms, cut up |
| 1 large or 2 me-<br>dium carrots,<br>sliced | 1 pat butter                  |
| 1 large onion,<br>diced                     | Juice of ½ lemon              |
| About 4½ ozs.<br>dry white wine             | 1½ pints cream                |
| ¾ cup water                                 | 4 egg yolks                   |
| 1 clove garlic                              | Sliced truffles<br>(optional) |

Cut capon into quarters and season with salt and pepper. Dredge in flour. Melt the butter in a shallow pan and add capon, carrots and onion. Cook for 15 minutes, browning capon on both sides. Add wine, water, garlic and herbs. Cook slowly about 40 minutes.

In the meantime, cook cut-up mushrooms in a very little butter for 7 to 8 minutes. Add lemon juice.

Put chicken into another metal pan and cover to keep it hot. Skim off fat from gravy and strain. Beat cream with egg yolks until thick. Mix in gravy slowly. Add mushroom mixture. Pour over chicken and warm slowly, taking care that it doesn't boil.

**Breast of Chicken San Francisco**

(San Francisco Restaurant, Paris)

- |  |   |
|--|---|
| 1 breast of chicken<br>(for preparation<br>see recipe for<br>Breast of<br>Chicken Carli-<br>gnano, page<br>78) | 1 egg, beaten<br>Flour to dredge<br>Bread crumbs<br>2 tablespoons but-<br>ter<br>2 slices of foie gras<br>Madiera sauce (for<br>preparation see<br>recipe for Beef<br>Filet Excelsior,<br>page 76.) |
| Salt and pepper to<br>taste  |   |
| 2 slices of cooked<br>ham  |   |

When chicken has been prepared, pound the breast meat between 2 pieces of waxed paper until very thin. Season lightly. Dip one side of each ham slice in the beaten egg and place one on each half of the chicken breast so that it adheres. Dredge in flour, egg and bread crumbs on both sides. Heat butter in shallow pan until golden brown. Then put the chicken in and cook until brown on both sides. Place in a medium hot oven for 10 minutes. Serve with Madeira sauce and garnish with slices of foie gras. Serves 2.

**Shrimps Excelsior Style**

(Hotel Excelsior, Rome)

- |                             |  |
|-----------------------------|--|
| 1½ pounds shrimp            | 2 large onions,<br>cut fine                |
| Salt and pepper<br>to taste | 4 ozs. white wine                          |
| ¼ cup of good<br>olive oil  | 2 tablespoons<br>finely chopped<br>parsley |

Clean shrimp. Put them in heated oil in a large saucepan. Add pepper, salt and onions. Fry for 5 minutes on a fairly high flame. Add wine and parsley. Remove shrimp and place on a serving dish. Pour over the sauce. Serve with slices of French bread, fried or toasted.

## Waterzoi

(Caprice Restaurant, London)

- |                            |                      |
|----------------------------|----------------------|
| 1 young chicken            | cream                |
| 2 leeks                    | Salt and pepper      |
| 1 head celery              | to taste             |
| 2 medium sized onions      | 3 tablespoons butter |
| 2 egg yolks                | 2½ tablespoons flour |
| 1 tablespoon or more heavy |                      |

Clean and cut the vegetables into fine strips. Slice the onions. Boil the chicken and vegetables in enough salted water to cover for 45 minutes. Remove the chicken; discard skin and cut into serving portions. Place on serving platter and keep hot. Strain off stock and reduce to 1½ pints. Melt butter, mix in flour, add the stock gradually and cook slowly for 10 to 15 minutes stirring constantly. Strain. Mix cream and egg yolks and add to sauce. Season to taste (add more cream or broth if sauce becomes too thick). Pour sauce over chicken and garnish with vegetables.

## Filet of Turkey Alfredo Style

(Ristorante "Alfredo," Rome)

- |   |                      |
|---|----------------------|
| 1 turkey breast cut lengthwise making 3 filets out of each half | 3 tablespoons butter |
| Salt and pepper to taste  | Flour to dredge      |
|   | 1 egg, well beaten   |

Season filets. Dip in flour, then in egg. Heat butter in frying pan. Place filets in pan, cooking very slowly (10 to 12 minutes on each side) until golden brown. Serves 3.

## Baby Chicken "Doctor"

(Restaurant Lapérouse, Paris)

- |                                     |                                    |
|-------------------------------------|------------------------------------|
| 1 chicken, about 2½ pounds          | (or veal or beef stock)            |
| Salt and pepper to taste            | 4 ozs. of red Port wine            |
| 2 tablespoons and 1 teaspoon butter | 4 thin, small slices of veal       |
| 1 pint veal gravy                   | ¼ teaspoon chopped, fresh tarragon |

Season chicken. Heat butter on stove and brown the chicken slowly on all sides. When brown place in a medium-hot oven. When about ¾ cooked, add wine and cook until it has been absorbed. Add gravy (or stock) and continue cooking until done,

basting when necessary so that the chicken doesn't get dry.

Cook chicken liver in 1 teaspoon butter. When it is still partly rare, cut in quarters and wrap a slice of veal around each segment. Fasten with toothpicks. Put back in pan, sprinkle with tarragon and continue cooking until veal is golden brown. Place chicken in a serving dish. Pour sauce over the chicken and garnish with veal and liver. Serves 2.

## Filet of Sole Elisabeth

(Restaurant Riche, Stockholm)

- |                          |                               |
|--------------------------|-------------------------------|
| 2 filets of sole         | 1 tomato                      |
| Salt and pepper to taste | 1 small clove garlic, crushed |
| Little flour             | ½ cup bread crumbs            |
| 2 tablespoons mayonnaise | 2 lemon slices                |
| 1 egg yolk               | Little chopped parsley        |
| 3 tablespoons oil        |                               |

Salt and pepper filets; dip lightly in flour. Combine egg yolk and mayonnaise. Mix well. Dip filets in mayonnaise mixture. Cook quickly in hot oil until golden brown. In the meantime, cut off ends of tomato. Cut into 3 thick slices. Mix crushed garlic and parsley with bread crumbs. Roll tomato slices in bread crumb mixture and sauté in a little butter. Serve with filets garnished with lemon slices. Serves 1.

## La Sole de Ma Tante "Marie"

(Restaurant Lucas Carton, Paris)

- |                                       |   |
|---------------------------------------|---|
| 8 medium filets of sole               | 8 or 9 mushrooms, chopped fine            |
| Salt and pepper to taste              | 1 pint cream                              |
| 8 ozs. of white wine                  | 1 tablespoon butter                       |
| Butter to thickly cover bottom of pan | 1 tablespoon of unsweetened whipped cream |

Season sole. Place in buttered pan. Pour in wine and cook until done. Remove filets and place on a serving dish. Continue cooking stock until it thickens. Add cream and simmer until it thickens again. Remove from fire. Add 1 tablespoon butter and whipped cream. In the meantime, cook mushrooms 5 to 8 minutes in a teaspoon of butter. Put on top of each filet a tablespoon of mushrooms. Pour sauce over the whole and place under broiler to brown. Serves 6.

**Crusted Lobster "Jockey"**

(Jockey Restaurant, Madrid)

- |   |                            |
|---|----------------------------|
| 1 lobster, about<br>1½ pounds, split<br>lengthwise. | 1 small onion, cut<br>fine |
| Salt and pepper to<br>taste                         | 1 tablespoon but-<br>ter   |
| 2 tablespoons good<br>olive oil                     | 2 ozs. brandy              |
|   | 8 ozs. cream               |
|   | Grated Parmesan<br>cheese  |

Cut lobster lengthwise into two pieces. Season with salt and pepper. Heat olive oil in a shallow pan and sauté lobster in the oil 5 to 6 minutes. Place in a medium hot oven for 5 minutes. In the meantime cook onion in butter until half done. Remove lobster from shell and cut up meat into large pieces. Add lobster meat to the onion on the fire. Sprinkle with brandy and add cream. Boil until sauce is reduced to one-half, adding seasoning if necessary. Place in a glass baking dish. Sprinkle with Parmesan cheese and brown in oven or under broiler. Serves 2.

**Volaille à la Façon du Chef**

(Hotel Canterbury, Brussels)

- |  |                                   |
|--|-----------------------------------|
| 2 breasts of<br>chicken (for<br>preparation see<br>recipe for<br>Breast of<br>Chicken Carli-<br>gnano, page<br>78) | 2 fresh tomatoes                  |
| Salt and pepper<br>to taste  | Asparagus tips—<br>enough for 4   |
| 4 teaspoons foie<br>gras   | 4 slices of truffle<br>(optional) |
| Flour to dredge  | <i>Red wine sauce:</i>            |
| 2 tablespoons<br>butter  | 4 shallots, cut<br>fine           |
|  | 1 tablespoon<br>butter            |
|  | 4½ ozs. red wine                  |
|  | ½ cup brown<br>gravy              |

When chicken has been prepared stuff 1 teaspoon of foie gras in hollow space between the meat in each half of breast. Season and dredge lightly in flour. Place chicken in heated butter in pan, allowing it to cook slowly until brown on both sides. To prepare wine sauce, simmer shallots in butter 4 to 5 minutes. Add wine and allow to simmer until it is reduced to about half. Add brown gravy and continue cooking for 8 to 9 minutes. In the meantime, cook asparagus tips and broil halved tomatoes. Place chicken breasts on serving

dish. Pour over red wine sauce. Garnish with sliced truffles. Serve with broiled tomatoes and asparagus tips with 1 tablespoon of white sauce mixed with 1 tablespoon of unsweetened cream. Serves 2.

**Lobster Lammenais**

(Taillevent, Paris)

- |  |                                |
|--|--------------------------------|
| 1 lobster, about<br>1½ pounds,<br>split lengthwise | 3 ozs. Madeira<br>wine         |
| 4 tablespoons<br>butter                            | ½ pint cream                   |
|  | ¼ pound mush-<br>rooms, cut up |

Split lobster lengthwise. Remove gravel and set coral aside. Crack claws. Brown butter in frying pan. Into this place lobster and cook it until it turns red (8 to 9 minutes). Add wine and simmer for about 2 minutes. Pour in cream and cook for 15 minutes more. Remove lobster to a platter. Reduce stock until it becomes thick enough to stick to the spoon. In the meantime, cook mushrooms slowly in a covered pan with a pat of butter until they are almost dry. Add coral and mushrooms to the strained lobster stock. Simmer until it thickens. Remove meat from shell and claws and add to sauce. Serve in the half shell. Serves 2.

**Omelette Flambée "O Sole Mio"**

(Ristorante "Alfredo," Rome)

- |                                |                  |
|--------------------------------|------------------|
| 5 eggs                         | Granulated sugar |
| 2 pats butter                  | to sprinkle      |
| 2 tablespoons ap-<br>ricot jam | 1 oz. rum        |

Beat eggs until fluffy. Heat butter in frying pan over a fairly high flame. Pour in eggs. When creamy on top spread jam in the middle. Fold from 2 opposite edges of the omelette so that they meet in the middle. Turn onto a serving dish. Sprinkle with sugar and decorate by making a design with a hot metal bar. At the table pour the rum over the omelette and strike a match to it. A darkened room and a musical accompaniment of "O Sole Mio" are recommended. Serves 3.



# INCOME TAX HELP

In this section we cover the Federal income tax law as well as gift and estate taxes and social security. We give the greatest emphasis to income tax help because it is in this area that everybody is affected.

We included this section because we felt that having this information around the house or office months in advance of the fateful due date will give you plenty of time to study it carefully.

We couldn't possibly answer every question or cover every situation in these few pages. But we do think that you will find most of the answers you need spelled out so that you will be able to tackle your return with understanding and confidence. If this section leaves some of your questions unanswered, we suggest that you consult your District Director of Internal Revenue, who is prepared to help you at no cost. In view of the pressure of work in that office around tax time, it would be wise to bring your problems there well ahead of time.

## WHO MUST FILE A RETURN?

If you are a citizen or a resident of the United States, and if your gross income for a year amounts to \$600 or more, you are required to file a return. This requirement applies to minors, as well as adults.

If you are more than 65 years old, you are required to file only if your gross income is \$1,200 or more.

## MUST I FILE A RETURN EVEN IF I DO NOT OWE ANY TAX?

Yes, if your income meets the foregoing requirements. In fact, some people required to file a return will be entitled to a tax refund.

## WHEN AND WHERE MUST INCOME TAX RETURNS BE FILED?

By April 15 of the year following that covered by the return, with the District Director of Internal Revenue, whose address is shown on the instruction sheet which you receive with your blank forms.

## WHAT FORM DO I USE?

There are two forms—Form 1040 and Form 1040A.

Form 1040 is the basic form, and every taxpayer is allowed to use it.

Form 1040A is a simpler form but only certain wage-earners are entitled to use it. Form 1040A is easier to use because the government computes your deductions and tax for you. All you do is provide the information about your income and exemptions. However, you may use this form only if your gross income is less than \$5,000 and only if it consists of wages and not more than \$100 in dividends and interest.

In computing your deductions under Form 1040A, the government will allow you only deductions for your dependents plus a "standard deduction" equal to approximately 10% of your income. If you are entitled to larger deductions than this, you can obtain them only by filing Form 1040.

## WHEN MUST I PAY MY TAX?

You must pay part of your tax in installments in the year in which you earn the income. This is the "pay-as-you-go" system. You are generally required to pay the rest of your tax when you file your return. It may turn out that you don't owe any additional tax when you file your return, or you may even be entitled to a refund, in which case the refund will be paid to you automatically after your return is filed.

## HOW DOES THE "PAY-AS-YOU-GO" SYSTEM WORK?

The "pay-as-you-go" system works in two ways, through withholding and declaration of estimated tax. You may be subject to either or both of these requirements.

(a) *Withholding.* Each time your employer pays you wages or salary, he is required to withhold and pay over to the government an amount which represents your income tax on the payment. The amount which he is required to withhold is set by law and varies with the number of dependents you have. At the end of each year, your employer will give you a form showing the amount of taxes withheld from your pay during the year. See table pages 89-90.

(b) *Declaration of estimated tax.* The declaration of estimated tax is a device whereby taxpayers are required to estimate their income for the current year and to pay the tax on this income in advance in quarterly installments during that year. Generally, the declaration of estimated tax must be filed and the first installment must be paid on April 15th, the same day on which the income tax return for the previous year is due.

Whether you are required to file such a declaration depends on how much gross income you expect to earn during the year. You are required to file a declaration if you expect your gross income to exceed \$5,000. This \$5,000 is increased to \$10,000

(joint income) if you are eligible to file a joint return. If you qualify as the head of a household, the \$10,000 figure also applies.

However, if you receive gross income of \$100 or more from sources other than wages, you may have to file a declaration even though your total earnings come to less than \$5,000 (or \$10,000 as the case may be). The test is as follows:

First, multiply \$600 by the number of exemptions you are entitled to and then add \$400. If you expect your gross income to be more than this sum, you are required to file a declaration. *Example:* You are married and have no children. You expect your income for 1955 to consist of \$200 in interest and \$2,500 in salary:

\$ 600	
× 2 Number of exemptions	
1,200	
+ 400	
\$1,600	

Since your expected income will be more than \$1,600, you are required to file a declaration.

Declarations are filed on Form 1040ES, which can be obtained from your District Director of Internal Revenue. Declarations can be amended if your financial circumstances change. If you file a declaration, you must make quarterly payments which together equal the amount of income tax which you expect to owe (on the basis of your estimated income) minus amounts you expect to be withheld by your employer.

#### WHAT IS A JOINT RETURN AND WHAT ARE ITS ADVANTAGES?

If you are married, you and your wife are allowed to report your combined income and your combined deductions on a single return. This is called a joint return. Your combined income is then taxed as though half were yours and half hers. This will usually result in a lower tax. The table on pages 91-92 will tell you what your tax will be if you file a joint return.

Sometimes, in unusual cases, a joint return will result in a higher tax. In such a case you may file separate returns.

You are permitted to file a joint return for the year in which your husband or wife dies. This privilege is extended for 2 additional years, provided you maintain a household, and a child for whom you are entitled to an exemption lives with you.

#### WHAT TAX PRIVILEGES ARE ACCORDED TO THE "HEAD OF A HOUSEHOLD"?

An unmarried person who pays more than half of the cost of maintaining a household will qualify as the "head of a

household," but only if all of the following conditions are met:

1. The taxpayer cannot be a person who is allowed to file a joint return.

2. There must reside in the household either an unmarried child or grandchild of the taxpayer or a relative for whom the taxpayer is entitled to an exemption. (See page 86).

3. Either the taxpayer himself or a parent for whom the taxpayer is entitled to an exemption must reside in the household.

The "head of a household" is taxed at lower rates than apply to other unmarried persons. The tax savings available to the "head of a household" are about one-half of those available to persons filing joint returns.

#### WHAT IS INCOME?

Income, for purposes of determining how much income tax you must pay, includes money and property which you receive for certain things, and excludes money and property which you receive for other things. To figure out how much tax you owe, you must first add up all of the items you receive which are subject to income tax. (See below.) You then subtract the deductions which you are allowed. (See page 86.) The amount which remains is known as your "taxable income," and you can figure your tax by applying the rate table to it.

#### WHAT ARE THE TAX RATES?

The income tax rates are printed in the tables on pages 91-92. You will see that income tax rates are not equal to a fixed percentage of your income, but that the percentage increases as your income increases.

#### WHICH ITEMS ARE SUBJECT TO TAX?

1. Wages, salary, commissions and other pay for services which you perform.

2. Income which you receive from a business which you operate.

3. Your share of the income of partnerships in which you are a partner. The income of a partnership is considered to be taxable income to the partners and they are taxed on it directly, whether it is paid as salary or profits or left in the business.

4. Interest which you receive on bonds (except state and municipal bonds) or interest which you receive on debts owed to you. Interest on bank accounts must be included in the year credited by the bank, even if you do not withdraw it until later.

5. Dividends received from corporations whose stock you own. (See page 88 for fuller discussion.)

6. Rents which you receive on property owned by you.

### 7. Royalties which you receive.

8. Gains from sales and exchanges of property. (See page 88 for discussion of capital gains.)

9. Alimony which anyone receives periodically. This does not include lump-sum settlements or payments for the support of minor children.

#### Examples:

(a) In 1954 you receive \$4,000 in alimony from a former husband, plus \$2,000 for the support of his minor children who are in your custody. The \$4,000 is subject to income tax, but the \$2,000 is not.

(b) In 1954 you receive \$25,000 in a lump-sum in satisfaction of all your claims against your divorced husband, including his obligation to support you. This sum is not subject to income tax.

10. Prizes and awards where you take an action to enter the contest or where you are required to perform future services. All prizes not given for "religious, charitable, scientific, educational, artistic, literary or civic achievement" are also subject to income tax.

#### Examples:

(a) In 1954 you won a prize of \$250 in a beauty contest. In order to obtain the money, you had to pose for pictures after the contest. The \$250 must be included by you as subject to income tax.

(b) In 1954 you won a Nobel Prize for literature. In order to obtain the prize money, it was not necessary for you to take any steps to enter the contest or to perform any future services. The prize money is, therefore, not subject to income tax.

### WHICH ITEMS ARE NOT SUBJECT TO TAX?

#### 1. Gifts which you receive.

##### Example:

In 1954 you receive \$1,000 as a gift from your father and \$500 called a gift, but intended as a bonus, from your employer. The \$1,000 is not subject to income tax. However, the \$500 really constitutes additional compensation, and is therefore subject to income tax.

2. Amounts which you inherit after an estate is settled.

3. Life insurance paid to you on the death of the insured person.

4. Death benefits, up to \$5,000, paid by the employer of a person who has died.

5. Interest which you receive on state and municipal bonds.

6. Repayments of money which you have loaned to others.

7. Amounts received for injury or sickness (your own or your family's) such as workmen's compensation or accident or

health insurance. This includes amounts (up to \$100 a week) paid in lieu of salary under a wage continuation plan. If you are sick but not hospitalized, this exemption does not apply to the first week's payment. If you are injured, it applies to the first week even if you are not hospitalized. However, if any part of this income reimburses you for expenses which you have previously claimed as a deduction that part becomes subject to tax.

*Example:* In 1954, you contracted influenza and were required to remain at home for 2 weeks. Because of this illness you received health insurance of \$75 under a policy which you paid for, and an additional \$40 under a policy your employer paid for to reimburse you for medical expenses. While you were ill at home, your employer continued to pay you your regular salary of \$110 per week.

#### Items subject to tax

\$110	first week's pay
10	part of second week's pay in excess of \$100
<hr/>	
\$120	

#### Items not subject to tax

\$100	exempt part of second week's pay
75	insurance
40	insurance
<hr/>	
\$215	

*Note:* Of the salary paid to you by your employer, the first week's pay is fully subject to tax because you were not hospitalized; and only \$100 of the second week's pay may be excluded.

8. Amounts received on a scholarship or fellowship, but only that portion which is not payment for teaching or other services. Undergraduate scholarships usually meet this requirement. If you are not a candidate for a degree, this provision applies only to the first \$300 per month received, and only for a period of 36 months.

9. Meals and lodgings furnished to you on your employer's premises for his convenience.

10. Combat pay received by members of the U. S. Armed Forces but, in the case of commissioned officers, only up to \$200 a month. Combat pay includes all pay for service in Korea, as long as it continues to be designated a "combat zone," and all pay received while hospitalized as a result of service in Korea.

11. Mustering-out payments received by members of the U. S. Armed Forces.

12. A profit made on the sale of your home provided the entire proceeds are used in the purchase of a new home within a year before or after the sale.



## WHICH ITEMS CAN BE DEDUCTED IN COMPUTING TAXABLE INCOME?

1. A \$600 "exemption" for the taxpayer, and

(a) An additional \$600 exemption for the taxpayer's wife if joint returns are filed (see above) or if she has no income of her own.

(b) An additional \$600 exemption for the taxpayer and his wife as each reaches the age of 65.

(c) An additional \$600 exemption for the taxpayer and/or his wife if either is blind.

(d) An additional \$600 exemption for each child who is under 19 years old or a full-time student. If the child is married and files a joint income tax return, the parent may not claim this deduction.

(e) An additional \$600 for each person in the following categories whose own gross income is less than \$600, provided the taxpayer furnishes more than half of his or her support: son; daughter; grandson; granddaughter; stepson; stepdaughter; brother; sister; stepbrother; stepsister; mother; father; grandmother; grandfather; great grandmother; great grandfather; stepfather; stepmother; nephew; niece; uncle; aunt; son-in-law; daughter-in-law; father-in-law; mother-in-law; brother-in-law; sister-in-law; any other person who is a member of the taxpayer's household (excluding servants).

Where no one taxpayer furnishes more than half of the support of such a person, but two or more together furnish such support, they may agree on which one is entitled to the \$600 exemption, if certain forms are filed. However, the taxpayer who claims this exemption must furnish more than 10% of the support. *Note:* An exemption obtained in this manner does not qualify the taxpayer for status as the head of a household.

2. Expenses of a trade or business which you own, including salaries paid to other persons and rent for your office or factory. Travel and entertainment expenses in connection with your business are also deductible, but, as with all other deductions, you should be able to prove the amount spent.

3. The cost of an employee's travel, meals and lodgings while away from home in connection with his job.

4. The expenses of a salesman (who sells at places other than his employer's place of business) in connection with his job.

5. Losses from the sale or exchange of property originally purchased for profit. This does not include your home or other property of a personal nature. (See Page 88 for discussion of capital losses.)

6. Expenses of employees (other than those already covered) in connection with their jobs. This does not include the cost of transportation between your home and your office or other place of business.

7. Expenses which you incur in an activity which you engage in for the production of income even if it is not your trade or business.

8. Interest which you pay on mortgages, bank loans and other loans.

Installment purchases will often entitle you to a deduction for interest:

(a) Any interest which is stated separately on your bill of sale, is deductible in full.

(b) If your bill of sale shows only a carrying charge with no interest specified, you may claim 6% of the average unpaid balance as interest, and deduct it accordingly.

*Example:* On July 10, 1954 you bought a washing machine on the installment plan for \$240 plus carrying charges (separately stated on your bill) of \$30. You paid \$50 down, and agreed to pay the balance of \$220 at the rate of \$20 on Aug. 10th and each month thereafter until June 10, 1955.

To compute your interest deduction for 1954, you must first find your average unpaid balance for that year. You do this by adding together what you still owe on the first of every month following the purchase.

*You still owe*

Aug. 1, 1954	\$220
Sept. 1, 1954	200
Oct. 1, 1954	180
Nov. 1, 1954	160
Dec. 1, 1954	140
Total	\$900

To find the average you divide this total by 12.

$12 / \$900$

$\$75$  average unpaid balance for 1954

multiply by .06

you get  $\$4.50$ , the interest which you may deduct

(c) If neither interest nor carrying charges are stated separately on your bill of sale, no deduction is allowed.

9. Real estate taxes (except assessments for improvements such as streets or sewers), sales taxes, state or local gasoline taxes, state stock transfer taxes and state income taxes are deductible. The following taxes are not deductible: federal income taxes, federal excise taxes, import duties, gift taxes and federal and state death taxes.

10. Losses which you sustain in any transaction entered into for profit, except losses already deducted under paragraph 5.

11. Losses from storms, floods, explosions, automobile collisions (except those caused by your own gross negligence) and thefts. However, you must subtract the amount of any insurance which you receive to compensate you for the loss.

12. Debts owed to you which become worthless during the year. Personal bad debts are treated as short-term capital losses. (See Page 88.)

13. Depreciation of buildings, machinery, furniture and vehicles used in your business or for the production of income.

14. Contributions to: the United States; a state, county or city; a religious, charitable, scientific, literary or educational organization; or a war veteran's organization. Any such contributions which you have made are deductible up to 20% of your adjusted gross income\*. In addition, you can deduct another 10% to cover your contributions to churches, schools and hospitals.

*Example:* In 1954 you contribute \$1,100 to a cancer research foundation and \$600 to your church. If your adjusted gross income\* is \$5,000 you are entitled to deduct up to \$1,500 (20% of \$5,000, or \$1,000 for the first type of contribution plus 10% of \$5,000, or \$500 for the second type of contribution). The remaining \$200 is not deductible.

15. You can deduct a part of your medical expenses. To determine how much is deductible, you should list all of the medical expenses of yourself and your dependents for which you have not been reimbursed. These include payments to doctors, dentists, hospitals and nurses as well as premiums for medical or health insurance. To these items you may add the cost of medicine and drugs, but only as much of the cost as exceeds 1% of your adjusted gross income\*. To arrive at the amount deductible you add these items together and subtract 3% of your adjusted gross income\*.

*Example:* In 1954 your medical expenses consist of the following: Doctor's bills, \$1,100; Hospital bills, \$475; Drugs, \$160. Let us suppose that your adjusted gross income\* is \$9,000:

Add:	Doctors' bills	.....	\$1,100	
	Hospital bills	.....	475	
	Drugs	.....	\$160	
	Minus 1%			
	adjusted			
	gross			
	income*	.....	90	70
				<u>\$1,645</u>

Now subtract 3% of adjusted gross income\*..... 270

The remainder is deductible.. \$1,375

\* This means your total income subject to tax minus the deductions described in paragraphs 2-6, 12 and 13.

*Note:* If you or your wife is 65 or older, your combined medical expenses may be deducted in full.

However, there are limits to the amount you may deduct. You may not deduct more than (a) \$5,000 if you do not file a joint return, or (b) \$10,000 if you file a joint return or if you qualify as the head of a household. In any case you may not deduct more than \$2,500 multiplied by the number of exemptions which you are entitled to, except exemptions for age and blindness. (See paragraph 1.)

16. Amounts paid by a woman or widower for the care of a child under 12 years of age (or any other dependent who is mentally or physically incapable of taking care of himself) so that the taxpayer can work. The amount cannot be paid to a person for whom the taxpayer is entitled to an exemption. This deduction cannot exceed \$600 in any event. In the case of a woman married to a man who can support himself, two additional limitations apply. First, a deduction is allowed only if they file joint returns. Second, if their joint adjusted gross income\* comes to more than \$4,500, the excess must be subtracted from the \$600 maximum deduction and only what is left may be claimed as a deduction.

*Examples:*

(a) You are a widow. In 1954 you pay \$800 for the care of your one-year-old son so that you can work. You are allowed the \$600 maximum deduction.

(b) You are married and file a joint return with your husband. In 1954 you pay \$800 for the care of your one-year-old son so that you can work. Your joint adjusted gross income\* is \$4,800.

From	\$4,800	joint adjusted gross income*
you subtract	4,500	
this leaves	\$ 300	

This must be subtracted from the \$600 maximum deduction, leaving \$300, which you may deduct.

(c) You are married, but do not file a joint return. You are not allowed any deduction under this provision.

17. Alimony paid by a husband, to the extent that it is included in his wife's gross income. (See above.)

18. The proportionate share of interest and real estate taxes paid by a tenant of a cooperative apartment or housing project.

19. You may be entitled to a larger deduction by claiming a "standard deduction" instead of deductions 6-11 and 14-18. The standard deduction is 10% of your adjusted gross income\*. But in no case can it be more than \$1,000.

In order to claim the standard deduc-

tion, you must give up the right to deductions 6-11 and 14-18. Before claiming the standard deduction, you should make sure that it would be larger than the other deductions that you would thereby lose.

If a husband and wife do not file a joint return there are two limitations on the standard deduction. Both of them must claim the standard deduction or neither of them will be entitled to it. In addition, the standard deduction cannot be more than \$500 for either husband or wife.

If you use Form 1040 and your adjusted gross income\* is less than \$5,000, you do not actually compute the 10% standard deduction. If you wish to claim this deduction, you must instead find your tax on the rate chart on the back of the form. The standard deduction has been included in making up that chart. If you wish, instead, to "itemize" the deductions described in paragraphs 6-11 and 14-18, you may do so.

If you use form 1040A (see page 83), the government automatically allows the standard deduction in computing your tax.

#### HOW ARE DIVIDENDS TREATED FOR INCOME TAX PURPOSES?

Dividends which you receive on corporate stock generally constitute a type of income which is subject to tax. However, there are two ways in which dividends are specially treated. The first \$50 of dividends which you receive during the year is tax-free. In addition, you are entitled to a credit against your income tax equal to 4% of all dividends above \$50 received during the year; but this credit cannot be more than 2% of your taxable income for 1954, or more than 4% of your taxable income for any later year. Another limitation on this credit is that it applies only to dividends received after July 31, 1954.

*Example:* On December 1, 1954, you receive dividends of \$1,000 on stock of the XYZ Corporation. If this is the only dividend which you received during 1954, \$950 of it (\$1,000 minus \$50) is subject to tax. In addition, you are entitled to a credit against your tax equal to 4% of the dividend above \$50, or 4% of \$950, which is \$38. However, this \$38 is allowed only if it comes to not more than 2% of your taxable income for 1954. Therefore, if your taxable income were only \$1,500, this credit would be reduced to \$30 (2% of \$1,500). However, if your taxable income were \$1,900 or more, you would be entitled to the full \$38 credit.

Dividends paid by a corporation are, under special circumstances, not subject to income tax at all. If any dividends which you receive are of this type, the corporation should so advise you. Because such dividends are not subject to income

tax, you are not entitled to take them into account in determining your 4% credit.

#### WHAT IS MEANT BY "CAPITAL GAINS" AND "CAPITAL LOSSES"?

When you sell stock, securities or many other types of property, the profit which you make is known as a "capital gain" and any loss which you sustain is known as a "capital loss." This rule does not apply, however, if you operate as a dealer in the property which you have sold.

Capital gains and capital losses are broken down, for income tax purposes, according to the length of time you owned the property. In the case of property which you owned for more than 6 months, they are known as *long-term* capital gains or *long-term* capital losses. Where you held the property for 6 months or less, they are known as *short-term* capital gains or *short-term* capital losses.

#### HOW ARE CAPITAL GAINS AND CAPITAL LOSSES TREATED FOR INCOME TAX PURPOSES?

If you have capital gains you must first separate them into short-term and long-term capital gains. Short-term capital gains are fully subject to income tax. On the other hand, only one-half of your long-term capital gains are subject to income tax. There is a further tax privilege on long-term capital gains of benefit only to taxpayers whose taxable income is at least \$18,000 (\$36,000 for joint returns and \$24,000 for head of household). No matter how high your income tax rate, your tax on long-term capital gains is never more than 25%.

Capital losses, whether long-term or short-term, are deductible, but only up to \$1,000 in a year. If your capital losses exceed \$1,000 in a year, the balance can be used to offset capital gains over the next five years; and it can also be used during the five-year period as a deduction at the rate of \$1,000 a year until it is used up. The way in which capital gains and capital losses offset each other is clearly indicated on the form.

#### *Income Taxes of Taxpayers Other than Individuals*

1. Corporations are required to file returns and pay income taxes on their "taxable income." The taxable income of a corporation is determined in much the same manner as the taxable income of individuals. There are, however, a number of differences in computing the taxable income of individuals and corporations. The present rate of tax is 30% of the first \$25,000 of taxable income, plus 52% of taxable income in excess of \$25,000. Corporations whose taxes are expected to be more than \$100,000 are also required to file declarations of estimated tax.

2. Partnerships are required to file re-

\* This means your total income subject to tax minus the deductions described in paragraphs 2-5, 12 and 13.



turns, but are not required to pay income taxes. (See paragraph 3 under "Which items are subject to tax?" above.)

3. Trusts and estates are required to file returns and to pay taxes on their income which is not distributed to beneficiaries. If income is distributed, the beneficiary, rather than the trust or estate, is required to pay taxes on it.

### Estate Taxes

The Internal Revenue Code levies an estate tax upon the "taxable estate" of persons who die. Included in a person's taxable estate is all of the property which he owned at the time of his death, his life insurance, and certain other items. Debts owed by the person and amounts left to charitable, educational and religious organizations are deductible. A deduction is also permitted for property left outright to the husband or wife of the person who has died, or amounts left in certain types of trusts for such a person, but only up to half of the taxable estate. No tax is

levied on the first \$60,000 of a person's taxable estate. (This means that no estate tax will be payable on the death of a person whose estate amounts to \$120,000, if he leaves at least half to his widow.)

### Gift Taxes

The Internal Revenue Code imposes a tax on gifts. The tax is levied upon the person who makes the gift. However, the first \$3,000 which you give outright to any one person during a year is exempt. In addition, each person is entitled to an additional exemption of \$30,000 which he can claim any time during his life. Gifts to charitable, educational and religious organizations are exempt from the tax. One-half of any outright gift to your wife or husband is also tax free. In addition, married persons can treat gifts actually made by one of them as being made half by one and half by the other. Gift tax returns must be filed by April 15. Forms can be obtained from your local District Director of Internal Revenue.

## Withholding Table for Employees Paid Weekly

If the wages are—		And the number of withholding exemptions claimed is—										
At least	But less than	The amount of tax to be withheld shall be—										
		0	1	2	3	4	5	6	7	8	9	10 or more
		18% of wages										
\$0.	\$13.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
\$13.	\$14.	\$2.40	.10	0	0	0	0	0	0	0	0	0
\$14.	\$15.	2.60	.30	0	0	0	0	0	0	0	0	0
\$15.	\$16.	2.80	.50	0	0	0	0	0	0	0	0	0
\$16.	\$17.	3.00	.70	0	0	0	0	0	0	0	0	0
\$17.	\$18.	3.20	.80	0	0	0	0	0	0	0	0	0
\$18.	\$19.	3.30	1.00	0	0	0	0	0	0	0	0	0
\$19.	\$20.	3.50	1.20	0	0	0	0	0	0	0	0	0
\$20.	\$21.	3.70	1.40	0	0	0	0	0	0	0	0	0
\$21.	\$22.	3.90	1.60	0	0	0	0	0	0	0	0	0
\$22.	\$23.	4.10	1.70	0	0	0	0	0	0	0	0	0
\$23.	\$24.	4.20	1.90	0	0	0	0	0	0	0	0	0
\$24.	\$25.	4.40	2.10	0	0	0	0	0	0	0	0	0
\$25.	\$26.	4.60	2.30	0	0	0	0	0	0	0	0	0
\$26.	\$27.	4.80	2.50	.20	0	0	0	0	0	0	0	0
\$27.	\$28.	5.00	2.60	.30	0	0	0	0	0	0	0	0
\$28.	\$29.	5.10	2.80	.50	0	0	0	0	0	0	0	0
\$29.	\$30.	5.30	3.00	.70	0	0	0	0	0	0	0	0
\$30.	\$31.	5.50	3.20	.90	0	0	0	0	0	0	0	0
\$31.	\$32.	5.70	3.40	1.10	0	0	0	0	0	0	0	0
\$32.	\$33.	5.90	3.50	1.20	0	0	0	0	0	0	0	0
\$33.	\$34.	6.00	3.70	1.40	0	0	0	0	0	0	0	0
\$34.	\$35.	6.20	3.90	1.60	0	0	0	0	0	0	0	0
\$35.	\$36.	6.40	4.10	1.80	0	0	0	0	0	0	0	0
\$36.	\$37.	6.60	4.30	2.00	0	0	0	0	0	0	0	0
\$37.	\$38.	6.80	4.40	2.10	0	0	0	0	0	0	0	0
\$38.	\$39.	6.90	4.60	2.30	0	0	0	0	0	0	0	0
\$39.	\$40.	7.10	4.80	2.50	.20	0	0	0	0	0	0	0
\$40.	\$41.	7.30	5.00	2.70	.40	0	0	0	0	0	0	0
\$41.	\$42.	7.50	5.20	2.90	.50	0	0	0	0	0	0	0
\$42.	\$43.	7.70	5.30	3.00	.70	0	0	0	0	0	0	0
\$43.	\$44.	7.80	5.50	3.20	.90	0	0	0	0	0	0	0

If the wages are—		And the number of withholding exemptions claimed is—										
At least	But less than	0	1	2	3	4	5	6	7	8	9	10 or more
		The amount of tax to be withheld shall be—										
\$44	\$45	8.00	5.70	3.40	1.10	0	0	0	0	0	0	0
\$45	\$46	8.20	5.90	3.60	1.30	0	0	0	0	0	0	0
\$46	\$47	8.40	6.10	3.80	1.40	0	0	0	0	0	0	0
\$47	\$48	8.60	6.20	3.90	1.60	0	0	0	0	0	0	0
\$48	\$49	8.70	6.40	4.10	1.80	0	0	0	0	0	0	0
\$49	\$50	8.90	6.60	4.30	2.00	0	0	0	0	0	0	0
\$50	\$51	9.10	6.80	4.50	2.20	0	0	0	0	0	0	0
\$51	\$52	9.30	7.00	4.70	2.30	0	0	0	0	0	0	0
\$52	\$53	9.50	7.10	4.80	2.50	.20	0	0	0	0	0	0
\$53	\$54	9.60	7.30	5.00	2.70	.40	0	0	0	0	0	0
\$54	\$55	9.80	7.50	5.20	2.90	.60	0	0	0	0	0	0
\$55	\$56	10.00	7.70	5.40	3.10	.80	0	0	0	0	0	0
\$56	\$57	10.20	7.90	5.60	3.20	.90	0	0	0	0	0	0
\$57	\$58	10.40	8.00	5.70	3.40	1.10	0	0	0	0	0	0
\$58	\$59	10.50	8.20	5.90	3.60	1.30	0	0	0	0	0	0
\$59	\$60	10.70	8.40	6.10	3.80	1.50	0	0	0	0	0	0
\$60	\$62	\$11.00	\$8.70	\$6.40	\$4.10	\$1.70	\$0	\$0	\$0	\$0	\$0	\$0
\$62	\$64	11.30	9.00	6.70	4.40	2.10	0	0	0	0	0	0
\$64	\$66	11.70	9.40	7.10	4.80	2.50	.20	0	0	0	0	0
\$66	\$68	12.10	9.80	7.40	5.10	2.80	.50	0	0	0	0	0
\$68	\$70	12.40	10.10	7.80	5.50	3.20	.90	0	0	0	0	0
\$70	\$72	12.80	10.50	8.20	5.90	3.50	1.20	0	0	0	0	0
\$72	\$74	13.10	10.80	8.50	6.20	3.90	1.60	0	0	0	0	0
\$74	\$76	13.50	11.20	8.90	6.60	4.30	2.00	0	0	0	0	0
\$76	\$78	13.90	11.60	9.20	6.90	4.60	2.30	0	0	0	0	0
\$78	\$80	14.20	11.90	9.60	7.30	5.00	2.70	.40	0	0	0	0
\$80	\$82	14.60	12.30	10.00	7.70	5.30	3.00	.70	0	0	0	0
\$82	\$84	14.90	12.60	10.30	8.00	5.70	3.40	1.10	0	0	0	0
\$84	\$86	15.30	13.00	10.70	8.40	6.10	3.80	1.50	0	0	0	0
\$86	\$88	15.70	13.40	11.00	8.70	6.40	4.10	1.80	0	0	0	0
\$88	\$90	16.00	13.70	11.40	9.10	6.80	4.50	2.20	0	0	0	0
\$90	\$92	16.40	14.10	11.80	9.50	7.10	4.80	2.50	.20	0	0	0
\$92	\$94	16.70	14.40	12.10	9.80	7.50	5.20	2.90	.60	0	0	0
\$94	\$96	17.10	14.80	12.50	10.20	7.90	5.60	3.30	.90	0	0	0
\$96	\$98	17.50	15.20	12.80	10.50	8.20	5.90	3.60	1.30	0	0	0
\$98	\$100	17.80	15.50	13.20	10.90	8.60	6.30	4.00	1.70	0	0	0
\$100	\$105	18.50	16.10	13.80	11.50	9.20	6.90	4.60	2.30	0	0	0
\$105	\$110	19.40	17.00	14.70	12.40	10.10	7.80	5.50	3.20	.90	0	0
\$110	\$115	20.30	17.90	15.60	13.30	11.00	8.70	6.40	4.10	1.80	0	0
\$115	\$120	21.20	18.80	16.50	14.20	11.90	9.60	7.30	5.00	2.70	.40	0
\$120	\$125	22.10	19.70	17.40	15.10	12.80	10.50	8.20	5.90	3.60	1.30	0
\$125	\$130	23.00	20.60	18.30	16.00	13.70	11.40	9.10	6.80	4.50	2.20	0
\$130	\$135	23.90	21.50	19.20	16.90	14.60	12.30	10.00	7.70	5.40	3.10	.80
\$135	\$140	24.80	22.40	20.10	17.80	15.50	13.20	10.90	8.60	6.30	4.00	1.70
\$140	\$145	25.70	23.30	21.00	18.70	16.40	14.10	11.80	9.50	7.20	4.90	2.60
\$145	\$150	26.60	24.20	21.90	19.60	17.30	15.00	12.70	10.40	8.10	5.80	3.50
\$150	\$160	27.90	25.60	23.30	21.00	18.70	16.40	14.10	11.70	9.40	7.10	4.80
\$160	\$172	29.70	27.40	25.10	22.80	20.50	18.20	15.90	13.50	11.20	8.90	6.60
\$170	\$180	31.50	29.20	26.90	24.60	22.30	20.00	17.70	15.30	13.00	10.70	8.40
\$180	\$190	33.30	31.00	28.70	26.40	24.10	21.80	19.50	17.10	14.80	12.50	10.20
\$190	\$200	35.10	32.80	30.50	28.20	25.90	23.60	21.30	18.90	16.60	14.30	12.00
		18 percent of the excess over \$200 plus—										
\$200 and over		36.00	33.70	31.40	29.10	26.80	24.50	22.20	19.80	17.50	15.20	12.90

### Rate Table for Separate Returns

If your taxable income is:				Your tax is:			
Not over \$2,000				20% of the taxable income			
Over \$	2,000	but not over \$	4,000	\$	400,	plus 22% of excess over \$	2,000
Over \$	4,000	but not over \$	6,000	\$	840,	plus 26% of excess over \$	4,000
Over \$	6,000	but not over \$	8,000	\$	1,360,	plus 30% of excess over \$	6,000
Over \$	8,000	but not over \$	10,000	\$	1,960,	plus 34% of excess over \$	8,000
Over \$	10,000	but not over \$	12,000	\$	2,640,	plus 38% of excess over \$	10,000
Over \$	12,000	but not over \$	14,000	\$	3,400,	plus 43% of excess over \$	12,000
Over \$	14,000	but not over \$	16,000	\$	4,260,	plus 47% of excess over \$	14,000
Over \$	16,000	but not over \$	18,000	\$	5,200,	plus 50% of excess over \$	16,000
Over \$	18,000	but not over \$	20,000	\$	6,200,	plus 53% of excess over \$	18,000
Over \$	20,000	but not over \$	22,000	\$	7,260,	plus 56% of excess over \$	20,000
Over \$	22,000	but not over \$	26,000	\$	8,380,	plus 59% of excess over \$	22,000
Over \$	26,000	but not over \$	32,000	\$	10,740,	plus 62% of excess over \$	26,000
Over \$	32,000	but not over \$	38,000	\$	14,460,	plus 65% of excess over \$	32,000
Over \$	38,000	but not over \$	44,000	\$	18,360,	plus 69% of excess over \$	38,000
Over \$	44,000	but not over \$	50,000	\$	22,500,	plus 72% of excess over \$	44,000
Over \$	50,000	but not over \$	60,000	\$	26,820,	plus 75% of excess over \$	50,000
Over \$	60,000	but not over \$	70,000	\$	34,320,	plus 78% of excess over \$	60,000
Over \$	70,000	but not over \$	80,000	\$	42,120,	plus 81% of excess over \$	70,000
Over \$	80,000	but not over \$	90,000	\$	50,220,	plus 84% of excess over \$	80,000
Over \$	90,000	but not over \$	100,000	\$	58,620,	plus 87% of excess over \$	90,000
Over \$	100,000	but not over \$	150,000	\$	67,320,	plus 89% of excess over \$	100,000*
Over \$	150,000	but not over \$	200,000	\$	111,820,	plus 90% of excess over \$	150,000*
Over \$	200,000			\$	156,820,	plus 91% of excess over \$	200,000*

\* The tax cannot in any event be more than 87% of taxable income.

### Rate Table for Head of Household Returns

If your taxable income is:	Your tax is:
Not over \$2,000	20% of the taxable income
Over \$ 2,000 but not over \$ 4,000	\$ 400, plus 21% of excess over \$ 2,000
Over \$ 4,000 but not over \$ 6,000	\$ 820, plus 24% of excess over \$ 4,000
Over \$ 6,000 but not over \$ 8,000	\$ 1,300, plus 26% of excess over \$ 6,000
Over \$ 8,000 but not over \$ 10,000	\$ 1,820, plus 30% of excess over \$ 8,000
Over \$ 10,000 but not over \$ 12,000	\$ 2,420, plus 32% of excess over \$ 10,000
Over \$ 12,000 but not over \$ 14,000	\$ 3,060, plus 36% of excess over \$ 12,000
Over \$ 14,000 but not over \$ 16,000	\$ 3,780, plus 39% of excess over \$ 14,000
Over \$ 16,000 but not over \$ 18,000	\$ 4,560, plus 42% of excess over \$ 16,000
Over \$ 18,000 but not over \$ 20,000	\$ 5,400, plus 43% of excess over \$ 18,000
Over \$ 20,000 but not over \$ 22,000	\$ 6,260, plus 47% of excess over \$ 20,000
Over \$ 22,000 but not over \$ 24,000	\$ 7,200, plus 49% of excess over \$ 22,000
Over \$ 24,000 but not over \$ 28,000	\$ 8,180, plus 52% of excess over \$ 24,000
Over \$ 28,000 but not over \$ 32,000	\$ 10,260, plus 54% of excess over \$ 28,000
Over \$ 32,000 but not over \$ 38,000	\$ 12,420, plus 58% of excess over \$ 32,000
Over \$ 38,000 but not over \$ 44,000	\$ 15,900, plus 62% of excess over \$ 38,000
Over \$ 44,000 but not over \$ 50,000	\$ 19,620, plus 66% of excess over \$ 44,000
Over \$ 50,000 but not over \$ 60,000	\$ 23,580, plus 68% of excess over \$ 50,000
Over \$ 60,000 but not over \$ 70,000	\$ 30,380, plus 71% of excess over \$ 60,000
Over \$ 70,000 but not over \$ 80,000	\$ 37,480, plus 74% of excess over \$ 70,000
Over \$ 80,000 but not over \$ 90,000	\$ 44,880, plus 76% of excess over \$ 80,000
Over \$ 90,000 but not over \$100,000	\$ 52,480, plus 80% of excess over \$ 90,000
Over \$100,000 but not over \$150,000	\$ 60,480, plus 83% of excess over \$100,000
Over \$150,000 but not over \$200,000	\$101,980, plus 87% of excess over \$150,000
Over \$200,000 but not over \$300,000	\$145,480, plus 90% of excess over \$200,000*
Over \$300,000	\$235,480, plus 91% of excess over \$300,000*

\* The tax cannot in any event be more than 87% of taxable income.

### Rate Table for Joint Returns

If your combined taxable income is:	Your tax is:
Not over \$4,000	20% of taxable income
Over \$ 4,000 but not over \$ 8,000	\$ 800, plus 22% of excess over \$ 4,000
Over \$ 8,000 but not over \$ 12,000	\$ 1,680, plus 26% of excess over \$ 8,000
Over \$ 12,000 but not over \$ 16,000	\$ 2,720, plus 30% of excess over \$ 12,000
Over \$ 16,000 but not over \$ 20,000	\$ 3,920, plus 34% of excess over \$ 16,000



## Rate Table for Joint Returns (contd.)

If your combined taxable income is:

Over \$ 20,000 but not over \$ 24,000.....
Over \$ 24,000 but not over \$ 28,000.....
Over \$ 28,000 but not over \$ 32,000.....
Over \$ 32,000 but not over \$ 36,000.....
Over \$ 36,000 but not over \$ 40,000.....
Over \$ 40,000 but not over \$ 44,000.....
Over \$ 44,000 but not over \$ 52,000.....
Over \$ 52,000 but not over \$ 64,000.....
Over \$ 64,000 but not over \$ 76,000.....
Over \$ 76,000 but not over \$ 88,000.....
Over \$ 88,000 but not over \$100,000.....
Over \$100,000 but not over \$120,000.....
Over \$120,000 but not over \$140,000.....
Over \$140,000 but not over \$160,000.....
Over \$160,000 but not over \$180,000.....
Over \$180,000 but not over \$200,000.....
Over \$200,000 but not over \$300,000.....
Over \$300,000 but not over \$400,000.....
Over \$400,000.....

Your tax is:

\$ 5,280, plus 38% of excess over \$ 20,000
\$ 6,800, plus 43% of excess over \$ 24,000
\$ 8,520, plus 47% of excess over \$ 28,000
\$ 10,400, plus 50% of excess over \$ 32,000
\$ 12,400, plus 53% of excess over \$ 36,000
\$ 14,520, plus 56% of excess over \$ 40,000
\$ 16,760, plus 59% of excess over \$ 44,000
\$ 21,480, plus 62% of excess over \$ 52,000
\$ 28,920, plus 65% of excess over \$ 64,000
\$ 36,720, plus 69% of excess over \$ 76,000
\$ 45,000, plus 72% of excess over \$ 88,000
\$ 53,640, plus 75% of excess over \$100,000
\$ 68,640, plus 78% of excess over \$120,000
\$ 84,240, plus 81% of excess over \$140,000
\$100,440, plus 84% of excess over \$160,000
\$117,240, plus 87% of excess over \$180,000
\$134,640, plus 89% of excess over \$200,000*
\$223,640, plus 90% of excess over \$300,000*
\$313,640, plus 91% of excess over \$400,000*

\* The tax cannot in any event be more than 87% of combined taxable income.

## SOCIAL SECURITY

The Social Security Act was passed in 1935 and amended in 1939, 1950, 1952 and 1954. Of its 11 programs, 2 are insurance systems financed by payroll taxes: federal old-age and survivors' insurance and federal-state unemployment insurance. The other 9 provide federal grants-in-aid to the states for needy persons who are aged, blind, or permanently disabled, for dependent children, and for services in behalf of maternal health, child health, crippled children, child welfare, public health and vocational rehabilitation.

The administration of the Act is the responsibility of the Department of Health, Education and Welfare. Within the Department, the Social Security Administration, headed by the Commissioner, conducts most of the program.

## Old-Age and Survivors' Insurance

## WHO IS COVERED?

In addition to the people previously covered, the new law of 1954 provides coverage for about 10 million more people. Among these are owners and operators of farms, clergymen (treated as self-employed under the law), professional engineers, architects, accountants and funeral directors. It includes many more hired farm workers, household workers, state and local government workers, even if they are under a retirement system, and federal employees not covered by any other retirement system. The law extends coverage to American citizens working abroad for American firms. This includes Americans working on vessels or aircraft even of foreign registry. The new law liberalizes the coverage for fishermen and "home-workers"—people who do piece work at home.

In the self-employed category, about the only people not subject to the social security old-age tax are lawyers, doctors, dentists, osteopaths, veterinarians, chiropractors, naturopaths and optometrists.

If you are eligible for coverage under the old-age insurance provisions of the social security system and you do not have a social security card, you may apply for one at the nearest social security office. Also the officials will be able to clear up any questions you have about the new law.

## WHO PAYS FOR THE INSURANCE AND HOW MUCH?

The social security tax will increase gradually from the present 2% to 4% in 1975. The following table gives the schedule:

Calendar Year	Workers and Employers Each to Pay	Self-Employed to Pay
1954-59.....	2%	3%
1960-64.....	2½%	3½%
1965-69.....	3%	4½%
1970-74.....	3½%	5½%
1975 & after.....	4%	6%

## HOW MUCH DO YOU OR YOUR SURVIVORS GET?

The regular payments to persons already retired have been increased by the new law by \$5.00 or more a month. Similar increases will go to the worker and his wife (over 65) and to widows (of any age) with dependent children. The table on page 93 summarizes the amounts payable in Sept. 1954 to persons already on the rolls prior to August 1954.

A worker will not be fully covered by

## Comparisons of Payments Under the Old Law and the New

(To Persons already on the rolls prior to Aug. 1954)

Avg. Monthly Wage	Worker		Worker and Wife	
	Old law	1954 Amendments	Old law	1954 Amendments
\$ 45.00 or less.....	\$25.00	\$30.00	\$ 37.50	\$ 45.00
73.00.....	40.00	45.00	58.40	67.50
100.00.....	55.00	60.00	80.00	90.00
200.00.....	70.00	78.50	105.00	117.80
300.00.....	85.00	98.50	127.50	147.80

Avg. Monthly Wage	Widow, Widower Parent, or Child		Widow and one child		Widow and two children	
	Old law	1954 Amendments	Old law	1954 Amendments	Old law	1954 Amendments
\$ 45.00 or less.....	\$18.80	\$30.00	\$ 37.60	\$ 45.00	\$ 45.10	\$ 50.20
73.00.....	30.00	33.80	58.40	67.60	58.50	67.60
100.00.....	41.30	45.00	80.00	90.00	80.00	90.20
200.00.....	52.50	58.90	105.00	117.80	140.10	157.10
300.00.....	63.80	73.90	127.60	147.80	168.90	197.10

the new law, that is, he will not be entitled to *all* of its benefits until his security taxes have been paid for at least 6 quarters (1½ years) after 1954.

The amount you get depends on your average monthly earnings. The new law allows you to bring your average up by omitting about 5 years of low or no earnings in figuring your average earnings. If a worker is totally disabled for a relatively long period (more than 6 months) before he reaches 65, his wages can be "frozen" at the level just before his disability. Under the old law, average wage for retirement purposes was determined by counting all the months before retirement, whether a man was idle or not. The new law allows the dropping out of years of no earnings or very low earnings, or periods of total disability. Payments would begin only at age 65, as with regular retirement. Applications for the total disability freeze will be accepted by the nearest social security office after Jan. 1, 1955. Under an older law veterans are permitted to count service time at the rate of \$160 per month in computing average wage.

The maximum yearly earnings subject to tax has been raised to \$4,200 (in place of \$3,600) and the benefits have been increased accordingly.

The benefits paid to the retired worker at 65, or to his survivors, are shown on the table on page 94.

A retired worker may be fully covered and still not receive the full benefits of his insurance. He loses his benefit checks for any month in which he renders substantial services in self-employment. He also loses some benefits if he earns

more than \$1,200 during the year. This applies only to money earned, not to other sources of income such as other pension payments, gifts or dividends. From 65 to 72, he cannot earn more than \$1,200 without losing at least one month's payment. If he earns more than \$1,280, he loses a second month's payment. If he earns more than \$1,360, he loses a third month's payment, and so on for each additional \$80 earned. If his annual earnings exceed \$2,080, he loses all the monthly payments. However, there is an important qualification to this rule. No matter how high his total earnings for the year, he does not lose the payments for any month in which he earns only \$80 or less. Thus, if a retired worker earns \$200 every month of the year, he loses his retirement benefits for all 12 months, but if he earns the entire \$2,400 in a single month, he loses only one month's benefits.

After he has reached the age of 72, the insured worker receives his full pension no matter how much he earns.

In addition to retirement benefits at 65, this insurance also pays a lump-sum death benefit to survivors of at least \$90 to \$225, or three times the worker's monthly retirement benefit. If you are covered by social security and die leaving dependent children under 18, with or without a widow, those dependents will receive substantial monthly payments until all the children have passed 18. Under the 1954 law, these payments will range from \$30 monthly for one child to \$200 maximum for widow and 2 or more children, according to your average monthly wage, as shown in the table on page 94.

## What You Get Under The New 1954 Law

Average Monthly Earnings after 1950 <sup>1</sup>	Retirement Benefits		Survivors' Benefits		
	Worker's monthly benefit	Worker and Wife <sup>2</sup>	Widow, child, etc.	Widow and 1 child	Widow and 2 children
\$ 45.....	\$ 30.00	\$ 45.00	\$ 30.00	\$ 45.00	\$ 50.20
100.....	55.00	82.50	41.30	82.60	82.60
110.....	60.50	90.80	45.40	90.80	90.90
120.....	62.50	93.80	46.90	93.80	96.00
130.....	64.50	96.80	48.40	96.80	104.00
140.....	66.50	99.80	49.90	99.80	112.00
150.....	68.50	102.80	51.40	102.80	120.00
160.....	70.50	105.80	52.90	105.80	128.00
170.....	72.50	108.80	54.40	108.80	136.00
180.....	74.50	111.80	55.90	111.80	144.00
190.....	76.50	114.80	57.40	114.80	152.00
200.....	78.50	117.80	58.90	117.80	157.10
210.....	80.50	120.80	60.40	120.80	161.20
220.....	82.50	123.80	61.90	123.80	165.10
230.....	84.50	126.80	63.40	126.80	169.20
240.....	86.50	129.80	64.90	129.80	173.10
250.....	88.50	132.80	66.40	132.80	177.20
260.....	90.50	135.80	67.90	135.80	181.10
270.....	92.50	138.80	69.40	138.80	185.20
280.....	94.50	141.80	70.90	141.80	189.10
290.....	96.50	144.80	72.40	144.80	193.20
300.....	98.50	147.80	73.90	147.80	197.10
310 <sup>3</sup> .....	100.50	150.80	75.40	150.80	200.00
320.....	102.50	153.80	76.90	153.80	200.00
330.....	104.50	156.80	78.40	156.80	200.00
340.....	106.50	159.80	79.90	159.80	200.00
350.....	108.50	162.80	81.40	162.80	200.00

<sup>1</sup> After drop-out of up to 5 years of lowest or no earnings. <sup>2</sup> She, too, must be 65 or over. <sup>3</sup> These rates are applicable to workers retiring or deceased after August 1954.

The law provides benefits to certain other survivors under conditions too complicated for our limited space.

## Public Assistance

The original Social Security Act provided for needy persons not covered by the old-age pension system. Eventually the number of needy persons requiring public assistance should diminish, since they will be getting old-age pensions and survivors' insurance under the new provisions of the law.

Aid to the needy is conducted jointly by the states and the federal government. The federal contribution to the states for assistance to the needy aged and blind per month is: \$20 of the first \$25 and 50% of any amount between \$25 and \$55. The blind are permitted to earn up to \$50 a month and still get full assistance. For dependent children, the federal government pays \$12 of the first \$15 and one-half the remainder up to \$30 per month. To be eligible the child must be under 16 (or under 18 if still at school), without

parental support or care and living with a member of the family.

## Unemployment Insurance

Unlike the old-age pension law, which is completely run by the federal government, unemployment insurance is managed jointly by the states and the national government. Wisconsin had its own law in 1934; most other states began paying benefits in 1938 and 1939.

## UNDER WHAT CONDITIONS CAN THE WORKER COLLECT?

The laws vary from state to state. In general, a waiting period of one week is required before collecting unemployment insurance; the worker must be able to work, must not have quit without good cause or have been discharged for misconduct; he must not be involved in a labor dispute; above all, he must be willing to take a job in his field at prevailing wage rates. Other restrictions on payments involve leaving for marriage, pregnancy or further education. Also, workers receiving vacation or dismissal pay, workmen's com-



pensation or veteran's allowances are considered ineligible.

The unemployed worker must go to the local state unemployment office to register his claim for unemployment benefits and must register for work. If a suitable opening is available in his field, he must accept it or lose his unemployment payments. If a worker moves out of his own state, he can still collect at his new residence; the state where he is now located will act as agent for the other state, which pays his benefits.

#### WHO PAYS FOR THE INSURANCE AND HOW MUCH?

The unemployment tax maximum is 3% of payroll; of this 0.3% must go to the federal government to pay for administering the law in the states; the remaining 2.7% or less is used solely for benefit payments by the state. The employer pays the complete tax in all states except in Alabama and New Jersey; in Alabama the employee pays from 0.1% to 1.0%; in New Jersey the employee pays  $\frac{1}{4}$  of 1%. Tax payments are payable on only the first \$3,000 of a worker's pay, except in Nevada where the limit was set at \$3,600 in 1954.

Under the "merit-rating" system, used in most states, employers with records of steady employment (that is, few layoffs) are rewarded with rates lower than the standard 2.7%. This system rewards the employers in industries with little or no seasonal fluctuation, or where the employers have been able to eliminate seasonal

ups and downs. Highly seasonal businesses are penalized by this device. The average tax rate in states with "merit-rating" is approximately 1.4%.

#### WHO IS COVERED AND WHO IS NOT?

Unemployment insurance must be paid by an employer having eight or more employees over 20 weeks in a year. Exempt workers include self-employed farm workers, domestic workers or members of the employer's family, railroad workers, insurance agents, workers in non-profit organizations, student nurses, internes and casual labor. Maritime workers have been included in most states since 1946.

#### Railroad Workers

These are covered by the Railroad Retirement Act, passed in 1935 and amended in 1937 and 1946. The social security provisions of this act are administered by the Railroad Retirement Board. It is paid for by taxing both employer and employee. The present rate is  $6\frac{1}{4}\%$ .

It provides retirement benefits at 65 or over (in some cases at 60), dependents' and survivors' benefits and disability allowances.

The Board also administers the Railroad Insurance Act, which provides unemployment insurance, sickness compensation and maternity benefits. The present costs are paid by the employer at  $\frac{1}{2}\%$  on wages up to \$300 a month. If benefits are increased, the rate may go from  $\frac{1}{2}\%$  to as high as 3%.

#### State Unemployment Compensation Maximums

State	Weekly benefit	Duration (in weeks)	State	Weekly benefit	Duration (in weeks)
Alabama.....	\$22	20	Montana.....	\$23	20
Alaska.....	35	26*	Nebraska.....	26	20
Arizona.....	20	20*	Nevada.....	30	26*
Arkansas.....	22	16	New Hampshire.....	30	26
California.....	30	26	New Jersey.....	30	26
Colorado.....	28	20	New Mexico.....	30	24
Connecticut.....	30	26*	New York.....	30	26
Delaware.....	25	26	North Carolina.....	30	26
D. C.....	20	20*	North Dakota.....	30	20*
Florida.....	20	16	Ohio.....	30	26*
Georgia.....	26	20	Oklahoma.....	28	22
Hawaii.....	25	20	Oregon.....	25	26
Idaho.....	25	26	Pennsylvania.....	30	26
Illinois.....	27	26	Rhode Island.....	25	26
Indiana.....	27	20	South Carolina.....	20	18
Iowa.....	26	20	South Dakota.....	25	20
Kansas.....	28	20	Tennessee.....	26	22
Kentucky.....	28	26	Texas.....	20	24
Louisiana.....	25	20	Utah.....	27.50	26
Maine.....	27	20	Vermont.....	25	20
Maryland.....	30	26*	Virginia.....	24	16
Massachusetts.....	25	26*	Washington.....	30	26
Michigan.....	30	26	West Virginia.....	30	24
Minnesota.....	30	26	Wisconsin.....	33	26½
Mississippi.....	30	16	Wyoming.....	30	26*
Missouri.....	25	24			

\* This amount will be increased for unemployed persons with dependents.

# CROSSWORD PUZZLE GUIDE



Since most persons who can read and write occasionally or frequently indulge in the indoor pastime of working crossword puzzles, this section is offered as a handy help to solvers who may be stumped for a two-letter word meaning "three-toed sloth" or a three-letter word meaning "native of Mindanao."

We have those two words here, and plenty more. We have the Greek, Roman, Norse and Egyptian deities of myth and legend. And we have those "Greek letters" and "months of the Jewish year" so often needed to fill out little gaps.

The reader is warned that in mythology there are many confusing and even conflicting accounts of the identities and adventures of the various gods, goddesses and lesser figures. There is also considerable variation in the spelling of names, places and things. For instance, you may spell it ICON, IKON or EIKON, and similar options are plentiful all along the crossword line. If the reader will keep further possible variations in mind, it may help at a critical point.

Various other sections of our book will be found of use to the crossword puzzler—especially the section of world geography and statistics which begins on page 713.

## First Aid to Crossword Puzzlers

(We cannot, of course, begin to list all the odd words you will meet with in your daily and Sunday crossword puzzles, for such words run into many thousands. But we have tried to include those which turn up most frequently, as well as many others which should be of help to you when you are unable to go any further.)

Also, we do not guarantee that the definitions in your puzzle will be exactly the same as ours, although we have checked every word with a standard dictionary and have followed its definition.

In nearly every case, we have used as the key word the principal noun of the definition, rather than any adjective, adjective phrase, or noun used as an adjective. And, to simplify your searching, we have grouped the words according to the number of spaces you have to fill.)

### Words of Two Letters

Ambary, DA  
And (French, Latin), ET  
Article (Arabic), AL  
(French), LA, LE, UN  
(Spanish), EL, LA, UN  
At the (French), AU  
(Spanish), AL  
Behold, LO  
Bird: Hawaiian, OO  
Birthplace: Abraham's, UR  
Bone, OS  
Buddha, FO  
Butterfly: Peacock, IO  
Champagne, AY  
Chaos, NU  
Chief: Burmese, BO  
Coin: Roman, AS  
Siamese, AT  
Concerning, RE  
Dialect: Chinese, WU  
Double (Egy. relig.), KA  
Drama: Japanese, NO  
Egg (comb. form), OO  
Esker, OS  
Eye (Scotch), EE  
Factor: Amplification, MU  
Fifty (Greek), NU  
Fish: Carplike, ID  
Force, OD  
Forty (Greek), MU  
From (French, Latin, Spanish), DE  
(Latin prefix), AB

From the (French), DU  
God: Babylonian, EA, ZU  
Egyptian sun, RA  
Hindu unknown, KA  
Semitic, EL  
Goddess: Babylonian, AI  
Greek earth, GE  
Gold (heraldry), OR  
Gulf: Arctic, OB  
Heart (Egy. relig.) AB  
Indian: South American, GE  
King: Of Bashan, OG  
Language: Artificial, RO  
Assamese, AO  
Lava: Hawaiian, AA  
Letter: Greek, MU, NU, PI, XI  
Hebrew, HE, PE  
Lily: Palm, TI  
Measure: Annamese, LY  
Chinese, HO, HU, KO, LI, MU, PU, TO, TU  
Japanese, GO, JO, MO, RI, SE, TO  
Metric land, AR  
Netherlands, EL  
Portuguese, PE  
Siamese, WA  
Swedish, AM  
Type, EM, EN  
Monk: Buddhist, BO

Month: Jewish, AB  
Mouth, OS  
Mulberry: Indian, AL  
Native: Burmese, WA  
Note: Of Scale, DO, FA, MI, LA, RE, TI  
Of (French, Latin, Spanish), DE  
Of the (French), DU  
One (Scotch), AE  
Pagoda: Chinese, TA  
Plant: East Indian fiber, DA  
Ridge: Sandy, AS, OS  
River: Russian, OB  
Sloth: Three-toed, AI  
Soul (Egy. relig.), BA  
Sound: Hindu mystic, OM  
Suffix: Comparative, ER  
The. See Article  
To the: French, AU  
Spanish, AL  
Tree: Buddhist sacred, BO  
Tribe: Assamese, AO  
Type: Jumbled, PI  
Weight: Annamese, TA  
Chinese, LI  
Danish, ES  
Japanese, MO  
Roman, AS  
Whirlwind: Faeroe Is., OE  
Yes (German), JA  
(Italian, Spanish), SI  
(Russian), DA

## Words of Three Letters

- Adherent, IST  
 Again, BIS  
 Age, ERA  
 Antelope: African, GNU, KOB  
 Apricot: Japanese, UME  
 Article (German), DAS, DEM, DEN, DER, DES, DIE, EIN  
 (French), LES, UNE  
 (Spanish), LAS, LOS, UNA  
 Banana: Polynesian, FEI  
 Barge, HOY  
 Bass: African, IYO  
 Beak, NEB, NIB  
 Beard: Grain, AWN  
 Beetle: June, DOR  
 Being, ENS  
 Berry: Hawthorn, HAW  
 Beverage: Hawaiian, AVA  
 Bird: Australian, EMU  
 Crowlike, JAY  
 Extinct, MOA  
 Fabulous, ROC  
 Frigate, IWA  
 Parson, POE, TUE, TUI  
 Sea, AUK  
 Blackbird, ANI, ANO  
 Born, NEE  
 Bronze: Roman, AES  
 Bugle: Yellow, IVA  
 By way of, VIA  
 Canton: Swiss, URI  
 Cap: Turkish, FEZ  
 Catnip, NEP  
 Character: In "Faerie Queen," UNA  
 Coin: Afghan, PUL  
 Albanian, LEK  
 British Guiana, BIT  
 Bulgarian, LEV, LEW  
 French, ECU, SOU  
 Indian, PIE  
 Japanese, SEN, YEN  
 Korean, WON  
 Lithuanian, LIT  
 Macao, Timor, AVO  
 Palestinian, MIL  
 Persian, PUL  
 Peruvian, SOL  
 Rumanian, BAN, LEU, LEY  
 Scandinavian, ORE  
 Siamese, ATT  
 See also Money of account  
 Collection: Facts, ANA  
 Commune: Belgian, ANS, ATH  
 Netherlands, EDE, EPE  
 Community: Russian, MIR  
 Constellation: Southern, ARA  
 Contraction: Poetic, EEN, EER, OER  
 Covering: Apex of roof, EPI
- Crab: Fiddler, UCA  
 Crag: Rocky, TOR  
 Cry: Crow, rook, raven, CAW  
 Cup: Wine, AMA  
 Cymbal: Oriental, TAL, ZEL  
 Disease: Silkworm, UJI  
 Division: Danish territorial, AMT  
 Geologic, EON  
 Doctrine, ISM  
 Dowry, DOT  
 Dry (French), SEC  
 Dynasty: Chinese, CHI, HAN, SUI, WEI, YIN  
 Eagle: Sea, ERN  
 Earth (comb. form), GEO  
 Egg: Louse, NIT  
 Eggs: Fish, ROE  
 Emmet, ANT  
 Enzyme, ASE  
 Equal (comb. form), ISO  
 Extension: building, ELL  
 Far (comb. form), TEL  
 Farewell, AVE  
 Fiber: Palm, TAL  
 Finial, EPI  
 Fish: Carplike, IDE  
 Pikelike, GAR  
 Flatfish, DAB  
 Fleur-de-lis, LIS, LYS  
 Food: Hawaiian, POI  
 Formerly, NEE  
 Friend (French), AMI  
 Game: Card, LOO  
 Garment: Camel-hair, ABA  
 Gateway, DAR  
 Gazelle: Tibetan, GOA  
 Genus: Ducks, AIX  
 Grasses, POA  
 Grasses (maize), ZEA  
 Herbs or shrubs, IVA  
 Lizards, UTA  
 Rodents (incl. house mice), MUS  
 Ruminants (incl. cattle), BOS  
 Swine, SUS  
 Gibbon: Malay, LAR  
 God: Assyrian, SIN  
 Babylonian, ABU, ANU, BEL, HEA, SIN, UTU  
 Irish sea, LER  
 Phrygian, MEN  
 Polynesian, ORO  
 Goddess: Babylonian, AYA  
 Etruscan, UNI  
 Hindu, SRI, UMA, VAC  
 Teutonic, RAN  
 Governor: Algerian, DEY  
 Turkish, BEY  
 Grampus, ORC  
 Grape, UVA  
 Grass: Meadow, POA  
 Gypsy, ROM  
 Hail, AVE  
 Hare: Female, DOE
- Hawthorn, HAW  
 Hay: Spread for drying, TED  
 Herb: Japanese, UDO  
 Perennial, PIA  
 Used for blue dye, WAD  
 Herd: Whales, GAM, POD  
 Hero: Spanish, CID  
 High (music), ALT  
 Honey (pharm.), MEL  
 Humorist: American, ADE  
 I (Latin), EGO  
 I love (Latin), AMO  
 Indian: Algonquian, FOX, SAC, WEA  
 Chimakuan, HOH  
 Keresan, SIA  
 Mayan, MAM  
 Shoshonean, UTE  
 Siouan, KAW, OTO  
 South American, ITE, ONA, URO, URU, YAO  
 Tierra del Fuego, ONA  
 Wakashan, AHT  
 Ingot, PIG  
 Inlet: Narrow, RIA  
 Island: Cyclades, IOS  
 Dodecanese, COS, KOS  
 (French), ILE  
 River, AIT  
 Jackdaw, DAW  
 John (Gaelic), IAN  
 Keelbill, ANI, ANO  
 Kiln, OST  
 King: British legendary, LUD  
 Kobold, NIS  
 Lace: To make, TAT  
 Lamprey, EEL  
 Language: Artificial, IDO  
 Bantu, ILA  
 Siamese, LAO, TAI  
 Leaf: Palm, OLA, OLE  
 Leaving, ORT  
 Left: Cause to turn, HAW  
 Letter: Greek, CHI, ETA, PHI, PSI, RHO, TAU  
 Hebrew, MEM, NUN, SIN, TAV, VAU  
 Lettuce, COS  
 Life (comb. form), BIO  
 Lily: Palm, TOI  
 Lizard, EFT  
 Louse: Young, NIT  
 Love (Anglo-Irish), GRA  
 Lute: Oriental, TAR  
 Macaw: Brazilian, ARA  
 Marble, TAW  
 Match: Shooting (French), TIR  
 Meadow, LEA  
 Measure: Abyssinian, TAT  
 Algerian, PIK  
 Annamese, GON, MAU  
 NGU, QUO, SAO, TAO, TAT  
 Arabian, DEN, SAA



- Belgian, VAT  
 Bulgarian, OKA, OKE  
 Chinese, FEN, TOU, YIN  
 Cloth, ELL  
 Cyprus, OKA, OKE, PIK  
 Czech, LAN, SAH  
 Danish, FOD, MIL, POT  
 Dominican Republic, ONA  
 Dutch, old, AAM  
 East Indian, KIT  
 Egyptian, APT, HEN, PIK,  
   ROB  
 Electric, MHO, OHM  
 Energy, ERG  
 English, PIN  
 Estonian, TUN  
 French, POT  
 German, AAM  
 Greek, PIK  
 Hebrew, CAB, HIN, KOR,  
   LOG  
 Hungarian, AKO  
 Icelandic, FET  
 Indian, GAZ, GUZ, JOW,  
   KOS  
 Japanese, BOO, CHO,  
   KEN, RIN, SHO, SUN,  
   TAN  
 Malabar, ADY  
 Metric land, ARE  
 Netherlands, KAN, KOP,  
   MUD, VAT, ZAK  
 Norwegian, FOT, POT  
 Persian, GAZ, GUZ, MOU,  
   ZAR, ZER  
 Polish, CAL  
 Rangoon, DHA, LAN  
 Roman, PES, URN  
 Russian, FUT, LOF  
 Scotch, COP  
 Siamese, KEN, NIU, RAI,  
   SAT, SEN, SOK, WAH,  
   YOT  
 Somaliland, TOP  
 Spanish, PIE  
 Straits Settlements, PAU,  
   TUN  
 Swedish, ALN, FOT, MIL,  
   REF, TUM  
 Swiss, POT  
 Tunisian, SAA  
 Turkish, OKA, OKE, PIK  
 Wire, MIL  
 Württemberg, IMI  
 Yarn, LEA  
 Yugoslavian, OKA, RIF  
 Milk, LAC  
 Milkfish, AWA  
 Moccasin, PAC  
 Money: Yap stone, FEI  
 Money of Account: Anglo-  
   Saxon, ORA, ORE  
   French, SOU  
   Indian, LAC  
   Japanese, RIN  
   Oman, GAJ  
   Virgin Islands, BIT  
   See also Coin
- Monkey: Capuchin, SAI  
 Morsel, ORT  
 Mother: Peer Gynt's, ASE  
 Mountain: Asia Minor, IDA  
 Mulberry: Indian, AAL,  
   ACH, AWL  
 Muttonbird: New Zealand,  
   OII  
 Nahoor, SNA  
 Native: Mindanao, ATA  
 Neckpiece, BOA  
 Newton, EFT  
 No (Scotch), NAE  
 Note: Guido's highest, ELA  
   Of scale, SOL  
 Nursemaid: Oriental, AMA,  
   IYA  
 Ocher: Yellow, SIL  
 One (Scotch), YIN  
 Ornament: Pagoda, TEE  
 Oven: Polynesian, UMU  
 Ox: Tibetan, YAK  
 Pagoda: Chinese, TAA  
 Parrot: Hawk, HIA  
   New Zealand, KEA  
 Part: Footlike, PES  
 Particle: Electrified, ION  
 Pasha, DEY  
 Pass: Mountain, COL  
 Paste: Rice, AME  
 Pea: Indian split, DAL  
 Peasant: Philippine, TAO  
 Penpoint, NEB, NIB  
 Piece out, EKE  
 Pigeon, NUN  
 Pine: Textile screw, ARA  
 Pistol (slang), GAT  
 Pit: Baking, IMU  
 Plant: Pepper, AVA  
 Play: By Capek, RUR  
 Poem: Old French, DIT  
 Porgy: Japanese, TAI  
 Priest: Biblical high, ELI  
 Prince: Ethiopian, RAS  
 Pseudonym: Dickens', BOZ  
 Queen: Fairy, MAB  
 Quince: Bengal, BEL  
 Record: Ship's, LOG  
 Refuse: Flax (Scotch), PAB,  
   POB  
 Resin, LAC  
 Resort, SPA  
 Revolver (slang), GAT  
 Right: Cause to turn, GEE  
 River: Scotch or English,  
   DEE (Spanish), RIO  
   Swiss, AAR  
 Room: Harem, ODA  
 Rootstock: Fern, ROI  
 Rose (Persian), GUL  
 Ruff: Female, REE  
 Rule: Indian, RAJ  
 Sailor, GOB, TAR  
 Saint: Female (abbr.), STE  
   Mohammedan, PIR  
 Salt, SAL  
 Sash: Japanese, OBI  
 Scrap, ORT
- Seed: Poppy, MAW  
   Small, PIP  
 Self, EGO  
 Serpent: Vedic sky, AHI  
 Sesame, TIL  
 Sheep: Female, EWE  
   Indian, SHA  
   Male, RAM  
 Sheepfold (Scotch), REE  
 Shelter, LEE  
 Shield, ECU  
 Shooting match (French),  
   TIR  
 Shrew: European, ERD  
 Shrub: Evergreen, YEW  
 Silkworm, ERI  
 Snake, ASP, BOA  
 Soak, RET  
 Son-in-law: Mohammed's,  
   ALI  
 Sorrel: Wood, OCA  
 Spade: Long, narrow, LOY  
 Spirit: Malignant, KER  
 Spot: Playing-card, PIP  
 Spread for drying, TED  
 Spring: Mineral, SPA  
 Sprite: Water, NIX  
 Statesman: Japanese, ITO  
 Stern: Toward, AFT  
 Stomach: Bird's, MAW  
 Street (French), RUE  
 Summer (French), ETE  
 Sun, SOL  
 Swamp, BOG, FEN  
 Swan: Male, COB  
 Tea: Chinese, CHA  
 Temple: Shinto, SHA  
 The. See Article  
 Thing (law), RES  
 Title: Etruscan, LAR  
   Monk's, FRA  
   Portuguese, DOM  
   Spanish, DON  
   Turkish, AGA, BEY  
 Tool: Cutting, ADZ, AXE  
   Mining, GAD  
   Piercing, AWL  
 Tree: Candlenut, AMA  
   Central American, EBO  
   East Indian, SAG, SAL  
   Evergreen, YEW  
   Hawaiian, KOA, KOU  
   Indian, BEL, DAR  
   Linden, LIN  
   New Zealand, AKE  
   Philippine, DAO, TUA,  
   TUI  
   Rubber, ULE  
   South American, APA  
 Tribe: New Zealand, ATI  
 Tumeric, REA  
 Twice, BIS  
 Twin: Siamese, ENG  
 Uncle (dialect), EAM, EME  
 Veil: Chalice, AER, AIR  
 Vessel: Wine, AMA  
 Vestment: Ecclesiastical,  
   ALB

Vetch: Bitter, ERS  
 Victrola, AKU  
 Vine: New Zealand, AKA  
     Philippine, IYO  
 Wallaba, APA  
 Wapiti, ELK  
 Water (French), EAU  
 Waterfall, LIN  
 Watering place: Prussian,  
     EMS  
 Weave: Designating plain,  
     UNI  
 Weight: Annamese, CAN  
     Bulgarian, OKA, OKE  
     Burmese, MOO, VIS  
     Chinese, FEN, HAO, KIN,  
     SSU, TAN, YIN

Cyprus, OKA, OKE  
 Danish, LOD, ORT, VOG  
 East Indian, TJI  
 Egyptian, KAT, OKA, OKE  
 English, for wool, TOD  
 German, LOT  
 Greek, MNA, OKA, OKE  
 Indian, SER  
 Japanese, FUN, KIN, RIN,  
     SHI  
 Korean, KON  
 Malacca, KIP  
 Mongolian, LAN  
 Netherlands, ONS  
 Norwegian, LOD  
 Polish, LUT  
 Rangoon, PAI  
 Roman, BES

Russian, LOT  
 Siamese, BAT, HAP, PAI  
 Swedish, ASS, ORT  
 Turkish, OKA, OKE  
 Yugoslavian, OKA, OKE  
 Whales: Herd, GAM, POD  
 Wildebeest, GNU  
 Wing, ALA  
 Witticism, MOT  
 Wolframite, CAL  
 Worm: African, LOA  
 Wreath: Hawaiian, LEI  
 Yale, ELI  
 Yam: Hawaiian, HOI  
 Yes (French), OUI  
 Young: Bring forth, EAN  
 Z (letter), ZED

### Words of Four Letters

Aborigine: Borneo, DYAK  
 Agave, ALOE  
 Animal: Footless, APOD  
 Ant: White, ANAI, ANAY  
 Antelope: African, ASSE,  
     BISA, GUIB, KOBA,  
     KUDU, ORYX, POKU,  
     PUKU, TOPI, TORA  
 Apoplexy: Plant, ESCA  
 Apple, POME  
 Apricot, ANSU  
 Ardor, ELAN  
 Armadillo, APAR, PEBA,  
     PEVA, TATU  
 Ascetic: Mohammedan,  
     SUFI  
 Association: Chinese, TONG  
 Astronomer: Persian, OMAR  
 Avatar: Of Vishnu, RAMA  
 Axillary, ALAR  
 Band: Horizontal (herald-  
     dry), FESS  
 Barracuda, SPET  
 Bark: Mulberry, TAPA  
 Base: Column, DADO  
 Bearing (heraldry), ORLE  
 Beer: Russian, KVAS  
 Belge, ECRU  
 Being, ESSE  
 Beverage: Japanese rice,  
     SAKE  
 Bird: Asian, MINA, MYNA  
     Egyptian sacred, IBIS  
     Extinct, DODO, MAMO  
     Flightless, KIWI  
     Gull-like, TERN  
     Hawaiian, IIVI, MAMO  
     Parson, KOKO  
     Unfledged, EYAS  
 Birds: As class, AVES  
 Black, EBON  
     (French), NOIR  
 Blackbird: European, MERL  
 Boat: Flat-bottomed, DORY  
 Bone: Forearm, ULNA  
 Bones, OSSA  
 Box: Japanese, INRO  
 Bravo (rare), EUGE

Buffalo: Indian wild, ARNA  
 Bull (Spanish), TORO  
 Burden, ONUS  
 Cabbage: Sliced, SLAW  
 Caliph: Mohammedan,  
     OMAR  
 Canoe: Malay, PRAU, PROA  
 Cap: Military, KEPI  
 Cape, NESS  
 Capital: Ancient Irish,  
     TARA  
 Case: Article, ETUI  
 Cat: Wild, BALU, EYRA  
 Chalcid, SARD  
 Chamber: Indian ceremo-  
     nial, KIVA  
 Channel: Brain, ITER  
 Cheese: Dutch, EDAM  
 Chest: Sepulchral stone,  
     CIST  
 Chieftain: Arab, EMIR  
 Church: Part of, APSE,  
     NAVE  
     (Scotch), KIRK  
 Claim (law), LIEN  
 Cluster: Flower, CYME  
 Coin: Chinese, TAEI, YUAN  
     German, MARK  
     Indian, ANNA  
     Iranian, RIAL  
     Italian, LIRA  
     Moroccan, OKIA  
     Siamese, BAHT  
     South American, PESO  
     Spanish, DURO, PESO  
     Turkish, PARA  
 Commune: Belgian, AATH  
 Composition: Musical,  
     OPUS  
 Compound: Chemical, DIOL  
 Constellation: Southern,  
     PAVO  
 Council: Russian, DUMA  
 Counsel, REDE  
 Covering: Seed, ARIL  
 Cross: Egyptian, ANKH  
 Cry: Bacchanalian, EVOE  
 Cup (Scotch), TASS

Cupbearer, SAKI  
 Dagger, DIRK  
     Malay, KRIS  
 Dam: River, WEIR  
 Dash, ELAN  
 Date: Roman, IDES  
 Dawn: Pertaining to, EOAN  
 Dean: English, INGE  
 Decay: In fruit, BLET  
 Deer: Sambar, MAHA  
 Disease: Skin, ACNE  
 Disk: Solar, ATEN  
 Dog: Hunting, ALAN  
 Drink: Hindu intoxicating,  
     SOMA  
 Duck, SMEE, SMEW, TEAL  
 Dynasty: Chinese, CHEN,  
     CHIN, CHOU, CHOW,  
     HSIA, MING, SUNG,  
     TANG, TSIN  
     Mongol, YUAN  
 Eagle: Biblical, GIER  
     Sea, ERNE  
 Egyptian: Christian, COPT  
 Ear: Pertaining to, OTIC  
 Entrance: Mine, ADIT  
 Esau, EDOM  
 Escutcheon: Voided, ORLE  
 Eskers, OSAR  
 Evergreen: New Zealand,  
     TAWA  
 Fairy: Persian, PERI  
 Family: Italian, ESTE  
 Far (comb. form), TELE  
 Farewell, VALE  
 Father (French), PERE  
 Fennel: Philippine, ANIS  
 Fever: Malarial, AGUE  
 Fiber: East Indian, JUTE  
 Firn, NEVE  
 Fish: Carplike, DACE  
     Hawaiian, ULUA  
     Herringlike, SHAD  
     Mackerellike, CERO  
     Marine, HAKE  
     Sea, LING, MERO, OPAH  
     Spiny-finned, GOBY  
 Food: Tropical, TARO

Foot: Metric, IAMB  
Formerly, ERST  
Founder: Of Carthage,  
DIDO  
France: Southern, MIDI  
Furze, ULEX  
Gaelic, ERSE  
Gaiter, SPAT  
Game: Card, FARO, SKAT  
Garlic: European wild,  
MOLY  
Garment: Hindu, SARI  
Roman, TOGA  
Gazelle, CORA  
Gem, JADE, ONYX, OPAL,  
RUBY  
Genus: Amphibians (incl.  
frogs), RANA  
Amphibians (incl. tree  
toads), HYLIA  
Antelopes, ORYX  
Auks, ALCA, URIA  
Bees, APIS  
Birds (American os-  
triches), RHEA  
Birds (cranes), GRUS  
Birds (magpies), PICA  
Birds (peacocks), PAVO  
Cetaceans, INIA  
Ducks (incl. mallards),  
ANAS  
Fish (burbots), LOTA  
Fishes (incl. bowfins),  
AMIA  
Genus: Geese (snow geese),  
CHEN  
Gulls, XEMA  
Herbs, ARUM, GEUM  
Insects (water scorpions),  
NEPA  
Lilies, ALOE  
Mammals (mankind),  
HOMO  
Orchids, DISA  
Owls, ASIO, BUBO, OTUS  
Palms, NIPA  
Sea birds, SULA  
Sheep, OVIS  
Shrubs, Eurasian, ULEX  
Shrubs (hollies), ILEX  
Shrubs (incl. Virginia  
Willow), ITEA  
Shrubs, tropical, EVEA  
Snakes (sand snakes),  
ERYX  
Swans, OLOR  
Trees, chocolate, COLA  
Trees (ebony family),  
MABA  
Trees (incl. maples),  
ACER  
Trees (Olives), OLEA  
Trees, tropical, EVEA  
Turtles, EMYS  
Goat: Wild, IBEX, KRAS,  
TAHR, TAIR, THAR  
God: Assyrian, ASUR

Babylonian, ADAD, ADDU,  
ENKI, ENZU, IRRA,  
NABU, NEBO, UTUG  
Celtic, LLEU, LLEW  
Hindu, AGNI, CIVA,  
DEVA, DEWA, KAMA,  
RAMA, SIVA, VAYU  
Phrygian, ATYS  
Shemitic, BAAL  
Teutonic, HLER  
Goddess: Babylonian, ERUA,  
GULA  
Hawaiian, PELE  
Hindu, DEVI, KALI, SHRI,  
VACH  
Gooseberry: Hawaiian,  
POHA  
Gourd, PEPO  
Grafted (heraldry), ENTE  
Grandfather (obsolete),  
AIEL  
Grandparents: Pertaining  
to, AVAL  
Grass: Hawaiian, HILO  
Gray (French), GRIS  
Green (heraldry), VERT  
Groom: Indian, SYCE  
Half (prefix), DEMI, HEMI,  
SEMI  
Hamlet, DORP  
Hammer-head: Part of,  
PEEN  
Handle, ANSA  
Harp: Japanese, KOTO  
Hartebeest, ASSE, TORA  
Hautboy, OBOE  
Hawk: Taken from nest  
(falconry), EYAS  
Hearing (law), OYER  
Heater: For liquids, ETNA  
Herb: Aromatic, ANET,  
DILL  
Fabulous, MOLY  
Perennial, GEUM, SEGO  
Pot, WORT  
Used for blue dye, WADE,  
WOAD  
Hill: Flat-topped, MESA  
Sand, DENE, DUNE  
Hoarfrost, RIME  
Hog: Immature female,  
GILT  
Holly, ILEX  
House: Cow, BYRE  
(Spanish), CASA  
Ice: Floating, FLOE  
Image, ICON, IKON  
Incarnation: Of Vishnu,  
RAMA  
Indian: Algonquian, CREE,  
SAUK  
Central American, MAYA  
Iroquoian, ERIE  
Mexican, CORA  
Peruvian, CANA, INCA,  
MORO  
Shoshonean, HOPI  
Siouan, OTOE

Southwestern, HOPI,  
PIMA, YUMA, ZUNI  
Insect: Immature, PUPA  
Instrument: Stringed,  
LUTE, LYRE  
Ireland, EIRE, ERIN  
Jacket: English, ETON  
Jail (British), GAOL  
Jar, OLLA  
Judge: Mohammedan, CADI  
Juniper: European, CADE  
Kiln, OAST, OVEN  
King: British legendary,  
LUDD, NUDD  
Kiss, BUSS  
Knife: Philippine, BOLO  
Koran: Section of, SURA  
Laborer: Spanish American,  
PEON  
Lake: Mountain, TARN  
(Scotch), LOCH  
Lamp: Miner's, DAVY  
Landing place: Indian,  
GHAT  
Language: Buddhist, PALI  
Japanese, AINU  
Latvian, LETT  
Layer: Of iris, UVEA  
Leaf: Palm, OLAY, OLLA  
Legislature: Ukrainian,  
RADA  
Lemur, LORI  
Leopard, PARD  
Let it stand, STET  
Letter: Greek, BETA, IOTA,  
ZETA  
Hebrew, AYIN, BETH,  
CAPH, KOPH, RESH,  
SHIN, TETH, YODH  
Papa, BULL  
Lily, ALOE  
Literature: Hindu sacred,  
VEDA  
Lizard, GILA  
Monitor, URAN  
Loquat, BIWA  
Magistrate: Genoese or Ve-  
netian, DOGE  
Man (Latin), HOMO  
Mark: Omission, DELE  
Marmoset: South American,  
MICO  
Meadow: Fertile, VEGA  
Measure: Electric, VOLT,  
WATT  
Force, DYNE  
Hebrew, OMER  
Printing, PICA  
Spanish or Portuguese,  
VARA  
Swiss land, IMMI  
Medley, OLIO  
Merganser, SMEW  
Milk (French), LAIT  
Molding, GULA  
Curved, OGEE  
Mongoose: Crab-eating,  
URVA



- Monk: Tibetan, LAMA  
 Monkey: African, MONA, WAAG  
     Ceylonese, MAHA  
     Cochin-China, DOUC  
     South American, SAKI, TITI  
 Monkshood, ATIS  
 Month: Jewish, ADAR, ELUL, IYAR  
 Mother (French), MERE  
 Mountain: Thessaly, OSSA  
 Mouse: Meadow, VOLE  
 Mythology: Norse, EDDA  
 Nail (French), CLOU  
 Native: Philippine, MORO  
 Nest: Of pheasants, NIDE  
 Network, RETE  
 No (German), NEIN  
 Noble: Mohammedan, AMIR  
 Notice: Death, OBIT  
 Novel: By Zola, NANA  
 Nursemaid: Oriental, AMAH, AYAH, EYAH  
 Nut: Philippine, PILI  
 Oak: Holm, ILEX  
 Oil (comb. form), OLEO  
 Ostrich: American, RHEA  
 Oven, KILN, OAST  
 Owl: Barn, LULU  
 Ox: Celebes wild, ANOE  
     Extinct wild, URUS  
 Palm, ATAP, NIPA, SAGO  
 Parliament, DIET  
 Parrot: New Zealand, KAKA  
 Pass: Indian mountain, GHAT  
 Passage: Closing (music), CODA  
 Peach: Clingstone, PAVY  
 Peasant: Indian, RYOT  
     Old English, CARL  
 Pepper: Australasian, KAVA  
 Perfume, ATAR  
 Persia, IRAN  
 Person: Extraordinary, ONER  
 Pickerel or pike, ESUX  
 Pitcher, EWER  
 Plant: Aromatic, NARD  
     Century, ALOE  
     Indigo, ANIL  
     Pepper, KAVA  
 Platform: Raised, DAIS  
 Pod: Wild, SLOE  
 Puds: Vegetable, OKRA, OKRO  
 Poem: Epic, EPOS  
 Poet: Persian, OMAR  
     Roman, OVID  
 Poison, BANE  
     Arrow, INEE  
 Forkfish, SISI  
 Portico: Greek, STOA  
 Premium, AGIO  
 Priest: Mohammedan, IMAM  
 Prima donna, DIVA  
 Prong: Fork, TINE  
 Pseudonym: Lamb's, ELIA  
 Queen: Carthaginian, DIDO  
     Hindu, RANI  
 Rabbit, CONY  
 Race: Of Japan, AINU  
 Rail: Ducklike, COOT  
     North American, SORA  
 Redshank, CLEE  
 Refuse: After pressing, MARC  
 Regiment: Turkish, ALAI  
 Reliquary, ARCA  
 Resort: Italian, LIDO  
 Ridges: Sandy, ASAR, OSAR  
 River: German, ELBE, ODER  
     Italian, ADDA  
     Siberian, LENA  
 Road: Roman, ITER  
 Rockfish: California, RENA  
 Rodent: Mouselike, VOLE  
     South American, PACA  
 Rootstock, TARO  
 Salamander, NEWT  
 Salmon: Silver, COHO  
     Young, PARR  
 Same (Greek), HOMO (Latin), IDEM  
 Sauce: Fish, ALEC  
 School: English, ETON  
 Seaweed, AGAR, ALGA, KELP  
 Secular, LAIC  
 Sediment, SILT  
 Seed: Dill, ANET  
     Of vetch, TARE  
 Serf, ILOT  
 Sesame, TEEL  
 Settlement: Eskimo, ETAH  
 Shark: Atlantic, GATA  
     European, TOPE  
 Sheep: Wild, UDAD  
 Sheltered, ALEE  
 Shield, EGIS  
 Ship: Jason's, ARGO  
     Left side of, PORT  
     Two-masted, BRIG  
 Shrine: Buddhist, TOPE  
 Shrub: New Zealand, TUTU  
 Sign: Magic, RUNE  
 Silkworm, ERIA  
 Skin: Beaver, PLEW  
 Skink: Egyptian, ADDA  
 Slave, ESNE  
 Sloth: Two-toed, UNAU  
 Smooth, LENE  
 Snow: Glacial, NEVE  
 Soapstone, TALC  
 Society: African secret, EGBO, PORO  
     Son: Of Seth, ENOS  
 Song (German), LIED  
     Unaccompanied, GLEE  
 Sound: Lung, RALE  
 Sour, ACID  
 Sow: Young, GILT  
 Spike: Brad-shaped, BROB  
 Spirit: Buddhist evil, MARA  
 Stake: Poker, ANTE  
 Star: Temporary, NOVA  
 Starch: East Indian, SAGO  
 Stone: Precious, OPAL  
 Strap: Bridle, REIN  
 Strewn (heraldry), SEME  
 Sweetsop, ATEs, ATTA  
 Sword: Fencing, EPEE, FOIL  
 Tambourine: African, TAAR  
 Tapir: Brazilian, ANTA  
 Tax, CESS  
 Tea: South American, MATE  
 Therefore (Latin), ERGO  
 Thing: Extraordinary, ONER  
 Three (dice, cards, etc.), TREY  
 Thrush: Hawaiian, OMAO  
 Tide, NEAP  
 Tipster: Racing, TOUT  
 Tissue, TELA  
 Title: Etruscan, LARS  
     Hindu, BABU  
     Indian, RAJA  
     Mohammedan, EMIR, IMAM  
     Persian, BABA  
     Spanish, DONA  
     Turkish, AGHA, BABA  
 Toad: Largest known, AGUA  
     Tree, HYL A  
 Tool: Cutting, ADZE  
 Track: Deer, SLOT  
 Tract: Sandy, DENE  
 Tree: Apple, SORB  
     Central American, EBOE  
     East Indian, TEAK  
     Eucalyptus, YATE  
     Guiana and Trinidad, MOR A  
     Javanese, UPAS  
     Linden, LIME, LINN, TEIL, TILL  
     Sandarac, ARAR  
     Sassafras, AGUE  
     Tamarisk salt, ATLE  
 Tribe: Moro, SULU  
 Trout, CHAR  
 Urchin: Street, ARAB  
 Vessel: Arab, DHOW  
 Vestment: Ecclesiastical, COPE  
 Vetch, TARE  
 Vine: East Indian, SOMA  
 Violinist: Famous, AUER  
 Vortex, EDDY  
 Wampum, PEAG  
 Wapiti, STAG  
 Waste: Allowance for, TRET  
 Watchman: Indian, MINA  
 Water (Spanish), AGUA  
 Waterfall, LINN  
 Wavy (heraldry), ONDE, UNDE  
 Wax, CERE  
     Chinese, PELA

Weed: Biblical, TARE  
 Weight: Ancient, MINA  
   Danish (pl.), ESER  
   East Asian, TAEI  
   Greek, MINA  
   Siamese, BAHT  
 Well done (rare), EUGE  
 Whale, CETE

Killer, ORCA  
 White, HUSE, HUSO  
 Whirlpool, EDDY  
 Wife: Of Geraint, ENID  
 Willow: Virginia, ITEA  
 Wine, PORT  
 Winged, ALAR  
   (Heraldry), AILE

Wings, ALAE  
 Withered, SERE  
 Without (French), SANS  
 Wool: To comb, CARD  
 Work, OPUS  
 Wrong: Civil, TORT  
 Young: Bring forth, YEAN

### Words of Five Letters

Abode of dead: Babylonian, ARALU  
 Aborigine: Borneo, DAYAK  
 Aftersong, EPODE  
 Aloe, AGAVE  
 Animal: Footless, APODE  
 Ant, EMMET  
 Antelope: African, ADDAX, BEISA,  
   CAAMA, ELAND, GUIBA, ORIBI,  
   TIANG  
   Goat, GORAL, SEROW  
   Indian, SASIN  
   Siberian, SAIGA  
 Arch: Pointed, OGIVE  
 Armadillo, APARA, POYOU, TATOU  
 Arrowroot, ARARU  
 Artery: Trunk, AORTA  
 Association: Russian, ARTEL  
   Secret, CABAL  
 Author: English, READE  
 Automaton, GOLEM, ROBOT  
 Award: Motion-picture, OSCAR  
 Basket: Fishing, CREEL  
 Beer: Russian, KVASS  
 Bible: Mohammedan, KORAN  
 Bird: Asian, MINAH, MYNAH  
   Indian, SHAMA  
   Larklike, PIPIT  
   Loonlike, GREBE  
   Oscine, VIREO  
   South American, AGAMI  
   Swimming, GREBE  
 Black: (French), NOIRE  
   (Heraldry), SABLE  
 Blackbird: European, MERLE, OUSEL,  
   OUZEL  
 Block: Glacial, SERAC  
 Blue (heraldry), AZURE  
 Boat: Eskimo, BIDAR, UMIK  
 Bobwhite, COLIN, QUAIL  
 Bone (comb. form), OSTEO  
   Leg, TIBIA  
   Thigh, FEMUR  
 Broom: Twig, BESOM  
 Brother (French), FRERE  
   Moses', AARON  
 Canoe: Eskimo, BIDAR, KAYAK  
 Cape: Papal, FANON, ORALE  
 Caravansary, SERAI  
 Card: Old playing, TAROT  
 Caterpillar: New Zealand, AWETO  
 Catkin, AMENT  
 Cavity: Stone, GEODE  
 Cephalopod, SQUID  
 Cetacean, WHALE  
 Chariot, ESSED  
 Cheek: Pertaining to, MALAR  
 Chieftain: Arab, EMEER  
 Child (Scotch), BAIRN

Cigar, CLARO  
 Coating: Seed, TESTA  
 Cockatoo: Palm, ARARA  
 Coin: Costa Rican, COLON  
   Danish, KRONE  
   Ecuadorian, SUCRE  
   English, Groat, PENCE  
   French, FRANC  
   German, KRONE, TALER  
   Hungarian, PENGÓ  
   Icelandic, KRONA  
   Indian, RUPEE  
   Iraqi, DINAR  
   Norwegian, KRONE  
   Polish, ZŁOTY  
   Russian, COPEC, KOPEK, RUBLE  
   Swedish, KRONA  
   Turkish, ASPIR  
   Yugoslav, DINAR  
 Collar: Papal, FANON, ORALE  
   Roman, RABAT  
 Commune: Italian, TREIA  
 Composition: Choral, MOTET  
 Compound: Chemical, ESTER  
 Conceal (law), ELOIN  
 Council: Ecclesiastical, SYNOD  
 Court: Anglo-Saxon, GEMOT  
   Inner, PATIO  
 Crest: Mountain, ARETE  
 Crown: Papal, TIARA  
 Cuttlefish, SEPIA  
 Date: Roman, NONES  
 Decree: Mohammedan, IRADE  
   Russian, UKASE  
 Deposit: Loam, LOESS  
 Desert: Gobi, SHAMO  
 Devilfish, MANTA  
 Disease: Cereals, ERGOT  
 Disk, PATEN  
 Dog: Wild, DHOLE, DINGO  
 Dormouse, LEROT  
 Drum, TABOR  
 Duck: Sea, EIDER  
 Dynasty: Chinese, CHING, LIANG, SHANG  
 Earthquake, SEISM  
 Eel, ELVER, MORAY  
 Ermine: European, STOAT  
 Ether: Crystalline, APIOL  
 Fabric: Velvetlike, PANNE  
 Fabulist, AESOP  
 Family: Italian, CENCI  
 Fiber: West Indian, SISAL  
 Fig: Smyrna, ELEME, ELEMI  
 Figure: Of speech, TROPE  
 Finch: European, SERIN  
 Fish: American small, KILLY  
 Flower: Garden, ASTER  
 Friend (Spanish), AMIGO

- Fruit: Tropical, MANGO  
 Fungus: Rye, ERGOT  
 Furze, GORSE  
 Gateway, TORAN, TORII  
 Gem, AGATE, BERYL, PEARL, TOPAZ  
 Genus: Barnacles, LEPAS  
   Bears, URSUS  
   Birds (loons), GAVIA  
   Birds (nuthatches), SITTA  
   Cats, FELIS  
   Dogs, CANIS  
   Fishes (chiros), ELOPS  
   Fishes (perch), PERCA  
   Geese, ANSER  
   Grasses, STIPA  
   Grasses (incl. oats), AVENA  
   Gulls, LARUS  
   Hares, rabbits, LEPUS  
   Hawks, BUTEO  
   Herbs, old world, INULA  
   Herbs, trailing or climbing, APIOS  
   Herbs, tropical, TACCA, URENA  
   Horses, EQUUS  
   Insects (olive flies), DACUS  
   Lice, plant, APHIS  
   Lichens, USNEA  
   Lizards, AGAMA  
   Moles, TALPA  
   Mollusks, OLIVA  
   Monkeys, CEBUS  
   Palms, ARECA  
   Pigeons, GOURA  
   Plants (amaryllis family), AGAVE  
   Ruminants (goats), CAPRA  
   Shrubs, Asiatic, SABIA  
   Shrubs (heath), ERICA  
   Shrubs (incl. raspberry), RUBUS  
   Shrubs, tropical, IXORA, TREMA,  
     URENA  
   Ticks, ARGAS  
   Trees (of elm family), TREMA, ULMUS  
   Trees, tropical, IXORA, TREMA  
 Goat: Bezoar, PASAN  
 God: Assyrian, ASHIR, ASHUR, ASSUR  
   Babylonian, DAGAN, SIRIS  
   Gaelic, DAGDA  
   Hindu, BHAGA, INDRA, SHIVA  
   Japanese, EBISU  
   Philistine, DAGON  
   Phrygian, ATTIS  
   Teutonic, AEGIR, GYMIR  
   Welsh, DYLAN  
 Goddess: Babylonian, ISTAR, NANAI  
   Hindu, DURGA, GAURI, SHREE  
 Group: Of six, HEXAD  
 Grove: Sacred to Diana, NEMUS  
 Growing out, ENATE  
 Guitar: Hindu, SITAR  
 Gull: PEWEE, PEWIT  
 Hartebeest, CAAMA  
 Headress: Jewish or Persian, TIARA  
   Liturgical, MITER, MITRE  
 Heath, ERICA  
 Herb: Grasslike marsh, SEDGE  
 Heron, EGRET  
 Hog: Young, SHOAT, SHOTE  
 Image, EIKON  
 Indian: Cariban, ARARA  
   Iroquoian, HURON  
   Mexican, AZTEC, OPATA, OTOMI  
   Muskhogeian, CREEK  
   Siouan, OSAGE, TETON  
   Spanish American, ARARA, CARIB  
 Inflorescence: Racemose, AMENT  
 Insect: Immature, LARVA  
 Intrigue, CABAL  
 Iris: Yellow, SEDGE  
 Juniper, GORSE, RETEM  
 Kidneys: Pertaining to, RENAL  
 King: British legendary, LLUDD  
 Kite: European, GLEDE  
 Kobold, NISSE  
 Land: Cultivated, ARADA, ARADO  
 Landholder (Scotch), LAIRD, THANE  
 Language: Dravidian, TAMIL  
 Lariat, LASSO, REATA  
 Laughing, Riant  
 Lawgiver: Athenian, DRACO, SOLON  
 Leaf: Calyx, SEPAL  
   Fern, FROND  
 Lemur, LORIS  
 Letter: English, AITCH  
   Greek, ALPHA, DELTA, GAMMA,  
     KAPPA, OMEGA, SIGMA, THETA  
   Hebrew, ALEPH, CHETH, GIMEL,  
     SADHE, ZAYIN  
 Lichen, USNEA  
 Lighthouse, PHARE  
 Lizard: Old World, AGAMA  
 Loincloth, DHOTI  
 Louse: Plant, APHID  
 Macaw: Brazilian, ARARA  
 Mahogany: Philippine, ALMON  
 Mammal: Badgerlike, RATEL  
   Civetlike, GENET  
   Giraffelike, OKAPI  
   Raccoonlike, COATI  
 Man (French), HOMME  
 Marble, AGATE  
 Mark: Insertion, CARET  
 Market place: Greek, AGORA  
 Marsupial: Australian, KOALA  
 Measure: Electric, FARAD, HENRY  
   Energy, JOULE  
   Metric, LITER, STERE  
   Printing, AGATE  
   Russian, VERST  
 Mixture: Smelting, MATTE  
 Mohicans: Last of, UNCAS  
 Molding: Convex, OVOLO, TORUS  
 Mole, TALPA  
 Monkey: African, PATAS  
   Capuchin, SAJOU  
   Howling, ARABA  
 Monkshood, ATEES  
 Month: Jewish, NISAN, SIVAN, TEBET  
 Museum (French), MUSEE  
 Musketeer, ATHOS  
 Native: Aleutian, ALEUT  
   New Zealand, MAORI  
 Neckpiece: Ecclesiastical, AMICE  
 Nerve (comb. form), NEURO  
 Nest: Eagle's or hawk's, AERIE  
   Insect's, NIDUS  
 Net: Fishing, SEINE  
 Newsstand, KIOSK



- Nitrogen, AZOTE  
 Noble: Mohammedan, AMEER  
 Nodule: Stone, GEODE  
 Nostrils, NARES  
 Notched irregularly, EROSE  
 Nymph: Mohammedan, HOURI  
 Official: Roman, EDILE  
 Oleoresin, ELEMI  
 Opening: Mouthlike, STOMA  
 Oration: Funeral, ELOGE  
 Ostiole, STOMA  
 Page: Left-hand, VERSO  
       Right-hand, RECTO  
 Palm, ARECA, BETEL  
 Park: Colorado, ESTES  
 Perfume, ATTAR  
 Philosopher: Greek, PLATO  
 Pillar: Stone, STELA, STELE  
 Pinnacle: Glacial, SERAC  
 Plain, LLANO  
 Plant: Century, AGAVE  
       Climbing, LIANA  
       Dwarf, CUMIN  
       East Asian perennial, RAMIE  
       Medicinal, SENNA  
       Mustard family, CRESS  
 Plate: Communion, PATEN  
 Poem: Lyric, EPODE  
 Point: Lowest, NADIR  
 Poplar, ABELE, ALAMO, ASPEN  
 Porridge: Spanish American, ATOLE  
 Post: Stair, NEWEL  
 Priest: Mohammedan, IMAUM  
 Protozoan, AMEBA  
 Queen: (French), REINE  
       Hindu, RANEE  
 Rabbit, CONEY  
 Rail, CRAKE  
 Red (heraldry), GULES  
 Religion: Moslem, ISLAM  
 Resin, ELEMI  
 Revoke (law), ADEEM  
 Rich man, MIDAS, NABOB  
 Ridge: Sandy, ESKAR, ESKER  
 River: French, LOIRE, SEINE  
 Rockfish: California, REINA  
 Rootstock: Fragrant, ORRIS  
 Ruff: Female, REEVE  
 Sack: Pack, KYACK  
 Salt: Ethereal, ESTER  
 Saltpeter, NITER, NITRE  
 Salutation: Eastern, SALAM  
 Sandpiper: Old World, TEREK  
 Scented, OLENT  
 School: Fish, SHOAL  
       French public, LYCEE  
 Scriptures: Mohammedan, KORAN  
 Seaweeds, ALGAE  
 Seed: Aromatic, ANISE  
 Seraglio, HAREM, SERAI  
 Serif, HELOT  
 Sheep: Wild, AUDAD  
 Sheeplike, OVINE  
 Shield, AEGIS  
 Shoe: Wooden, SABOT  
 Shoots: Pickled bamboo, ACHAR  
 Shot: Billiard, CAROM, MASSE  
 Shrine: Buddhist, STUPA  
 Shrub: Burning bush, WAHOO  
       Ornamental evergreen, TOYON  
       Used in tanning, SUMAC  
 Silk: Watered, MOIRE  
 Sister (French), SOEUR  
       (Latin), SOROR  
 Six: Group of, HEXAD  
 Skeleton: Marine, CORAL  
 Slave, HELOT  
 Snake, ABOMA, ADDER, COBRA, RACER  
 Soldier: French, POILU  
       Indian, SEPOY  
 Sour, ACERB  
 Spirit: Air, ARIEL  
 Staff: Shepherd's, CROOK  
 Starwort, ASTER  
 Steel (German), STAHL  
 Stockade: Russian, ETAPE  
 Stop (nautical), AVAST  
 Storehouse, ETAPE  
 Subway: Parisian, METRO  
 Tapestry, ARRAS  
 Tea: Paraguayan, YERBA  
 Temple: Hawaiian, HEIAU  
 Terminal: Positive, ANODE  
 Theater: Greek, ODEON, ODEUM  
 Then (French), ALORS  
 Thread: Surgical, SETON  
 Thrush: Wilson's, VEERY  
 Title: Hindu, BABOO  
       Indian, RAJAH, SAHEB, SAHIB  
       Mohammedan, EMEER, IMAUM  
 Tree: Buddhist sacred, PIPAL  
       East Indian cotton, SIMAL  
       Hickory, PECAN  
       Light-wooded, BALSA  
       Malayan, TERAP  
       Mediterranean, CAROB  
       Mexican, ABETO  
       Mexican pine, OCOTE  
       New Zealand, MAIRE  
       Philippine, ALMON  
       Rain, SAMAN  
       South American, UMBRA  
       Tamarack, LARCH  
       Tamarisk salt, ATLEE  
       West Indian, ACANA  
 Trout, CHARR  
 Troy, ILION, ILIUM  
 Twin: Siamese, CHANG  
 Vestment: Ecclesiastical, STOLE  
 Violin: Famous, AMATI, STRAD  
 Volcano: Mud, SALSE  
 Wampum, PEAGE  
 War cry: Greek, ALALA  
 Wavy (heraldry), UNDEE  
 Weight: Jewish, GERAH  
 Wen, TALPA  
 Wheat, SPELT  
 Wheel: Persian water, NORIA  
 Whitefish, CISCO  
 Willow, OSIER  
 Window: Bay, ORIEL  
 Wine, MEDOC, RHINE, TINTA, TOKAY  
 Winged, ALATE  
 Woman (French), FEMME  
 Year: Excess of solar over lunar, EPACT  
 Zoroastrian, PARSII

## Words of Six or More Letters

- Agave, MAGUEY  
 Alkaloid: Crystalline, ESERIN, ESERINE  
 Alligator, CAYMAN  
 Amphibole, EDENITE, URALITE  
 Ant: White, TERMITES  
 Antelope: African, DIKDIK, DUIKER,  
     GEMSBOK, IMPALA, KOODOO  
     European, CHAMOIS  
     Indian, NILGAI, NILGAU, NILGHAI,  
     NILGHAU  
 Ape: Asian or East Indian, GIBBON  
 Appendage: Leaf, STIPEL, STIPULE  
 Armadillo, PELUDO, TATOUAY  
 Arrowroot, ARARAO  
 Ascetic: Jewish, ESSENE  
 Ass: Asian wild, ONAGER  
 Avatar: Of Vishnu, KRISHNA  
 Babylonian, ELAMITE  
 Badge: Shoulder, EPAULET  
 Baldness, ALOPECIA  
 Barracuda, SENNET  
 Bark: Aromatic, SINTOC  
 Bearlike, URSINE  
 Beetle, ELATER  
 Bible: Zoroastrian, AVESTA  
 Bird: Sea, PETREL  
     South American, SERIEMA  
     Wading, AVOCET, AVOSET  
 Bone: Leg, FIBULA  
 Branched, RAMATE  
 Brother (Latin), FRATER  
 Bunting: European, ORTOLAN  
 Call: Trumpet, SENNET  
 Canoe: Eskimo, BAIKAR, OOMIAK  
 Caravansary, IMARET  
 Cat: Asian or African, CHEETAH  
     Leopardlike, OCELOT  
 Cenobite: Jewish, ESSENE  
 Centerpiece: Table, EPERGNE  
 Cetacean, DOLPHIN, PORPOISE  
 Chariot, ESSEDA, ESSEDE  
 Chief: Seminole, OSCEOLA  
 Claim: Release as (law), REMISE  
 Clock: Water, CLEPSYDRA  
 Cloud, CUMULUS, NIMBUS  
 Coach: French hackney, FIACRE  
 Coin: Czech, KORUNA  
     Ethiopian, TALARI  
     Finnish, MARKKA  
     German, THALER  
     Greek, DRACHMA  
     Haitian, GOURDE  
     Honduran, LEMPIRA  
     Hungarian, FORINT  
     Indo-Chinese, PIASTER  
     Netherlands, GUILDER  
     Panamanian, BALBOA  
     Paraguayan, GUARANI  
     Portuguese, ESCUDO  
     Russian, KOPECK, KOPECK, ROUBLE  
     Spanish, PESETA  
     Venezuelan, BOLIVAR  
 Communion: Last holy, VIATICUM  
 Conceal (law), ELOIGN  
 Confection, PRALINE  
 Construction: Sentence, SYNTAX  
 Convexity: Shaft of column, ENTASIS  
 Court: Anglo-Saxon, GEMOTE  
 Cow: Sea, DUGONG, MANATEE  
 Cylindrical, TERETE  
 Dagger, STILETTO  
     Malay, CREESE, KREESE  
 Date: Roman, CALENDIS, KALENDS  
 Deer, CARIBOU, WAPITI  
 Disease: Plant, ERINOSE  
 Doorkeeper, OSTIARY  
 Dragonflies: Order of, ODANATA  
 Drink: Of gods, NECTAR  
 Drum: TABOUR  
     Moorish, ATABAL, ATTABAL  
 Duck: Fish-eating, MERGANSER  
     Sea, SCOTER  
 Dynasty: Chinese, MANCHU  
 Eel, CONGER  
 Edit, REDACT  
 Envelope: Flower, PERIANTH  
 Eskimo, AMERIND  
 Ether: Crystalline, APIOLE  
 Excuse (law), ESSOIN  
 Eyespots, OCELLI  
 Fabric, ESTAMENE, ESTAMIN, ETAMINE  
 Falcon: European, KESTREL  
 Figure: Used as column, CARYATID,  
     TELAMON  
 Fine: For punishment, AMERCE  
 Fish: Asian fresh-water, GOURAMI  
     Pikelike, BARRACUDA  
 Five: Group of, PENTAD  
 Fly: African, TSETSE  
 Foot: Metric, ANAPEST, IAMBUS  
 Foxlike, VULPINE  
 Frying pan, SPIDER  
 Fur, KARAKUL  
 Galley: Greek or Roman, BIREME,  
     TRIEME  
 Game: Card, ECARTE  
 Garment: Greek, CHLAMYS  
 Gateway, GOPURA, TORANA  
 Genus: Birds (ravens, crows), CORVUS  
     Eels, CONGER  
     Fishes, ANABAS  
     Foxes, VULPES  
     Herbs, ANEMONE  
     Insects, CICADA  
     Lemurs, GALAGO  
     Mints (incl. catnip), NEPETA  
     Mollusks, ANOMIA, ASTARTE, TEREDO  
     Mollusks (incl. oysters), OSTREA  
     Monkeys (spider monkeys), ATELES  
     Thrushes (incl. robins), TURDUS  
     Trees (of elm family), CELTIS  
     Trees (incl. dogwood), CORNUS  
     Trees, tropical American, SAPOTA  
     Wrens, NANNUS  
 Gibbon, SIAMANG, WOUWOU  
 Gland: Salivary, RACEMOSE  
 Goat: Bezoar, PASANG  
 Goatlike, CAPRINE  
 God: Assyrian, ASHSHUR, ASSHUR  
     Babylonian, BABBAR, MARDUK, MERO-  
     DACH, NANNAR, NERGAL, SHAMASH  
     Hindu, BRAHMA, KRISHNA, VISHNU  
     Tahitian, TAAROA  
 Goddess: Babylonian, ISHTAR

- Hindu, CHANDI, HAIMAVATI,  
LAKSHMI, PARVATI, SARASVATI,  
SARASWATI  
Government, POLITY  
Governor: Persian, SATRAP  
Grandson (Scotch), NEPOTE  
Group: Of five, PENTAD  
Of nine, ENNEAD  
Of seven, HEPTAD  
Hare: In first year, LEVERET  
Harpsichord, SPINET  
Herb: Alpine, EDELWEISS  
Chinese, GINSENG  
South African, FREESIA  
Hermit, EREMIT  
Hero: Legendary, PALADIN  
Heron, BITTERN  
Horselike, EQUINE  
Hound: Short-legged, BEAGLE  
House (French), MAISON  
Idiot, CRETIN  
Implement: Stone, NEOLITH  
Incarnation: Hindu, AVATAR  
Indian, APACHE, COMMANCHE, PAIUTE,  
SENECA  
Inn: Turkish, IMARET  
Insects: Order of, DIPTERA  
Instrument: Japanese banjolike, SAMISEN  
Musical, CLAVIER, SPINET  
Interstice, AREOLA  
Ironwood, COLIMA  
Juniper: Old Testament, RAETAM  
Kettledrum, ATABAL  
King: Fairy, OBERON  
Kneecap, PATELLA  
Knife, MACHETE  
Langur: Sumatran, SIMPAI  
Legislature: Spanish, CORTES  
Lemur: African, GALAGO  
Madagascar, AYEAYE  
Letter: Greek, EPSILON, LAMBDA, OMI-  
CRON, UPSILON  
Hebrew: DALETH, LAMEDH, SAMEKH  
Lighthouse, PHAROS  
Lizard, IGUANA  
Llama, ALPACA  
Lockjaw, TETANUS  
Locust, CICADA, CICALA  
Macaw: Brazilian, MARACAN  
Maid: Of Astolat, ELAINE  
Mammal: Madagascar, TENDRAC,  
TENREC  
Man (Spanish), HOMBRE  
Marmoset: South American, TAMARIN  
Marsupial, BANDICOOT, WOMBAT  
Massacre, POGROM  
Mayor: Spanish, ALCALDE  
Measure: Electric, AMPERE, COULOMB,  
KILOWATT  
Medicine: Quack, NOSTRUM  
Member: Religious order, CENOBITE  
Molasses, TREACLE  
Monkey: African, GRIVET, NISNAS  
Asian, LANGUR  
Philippine, MACHIN  
South American, PINCHE, SAIMIRI,  
SAMIRI, SAPAJOU  
Monster, CHIMERA, GORGON  
(Comb. form), TERATO  
Cretan, MINOTAUR  
Month: Jewish, HESHVAN, KISLEV, SHE-  
BAT, TAMMUZ, TISHRI, VEADAR  
Mountain: Asia Minor, ARARAT  
Mulct, AMERCE  
Musketeer, ARAMIS, PORTHOS  
Nearsighted, MYOPIC  
Net, TRAMMEL  
New York City, GOTHAM  
Nine: Group of, ENNEAD  
Nobleman: Spanish, GRANDÉE  
Official: Roman, AEDILE  
Onyx: Mexican, TECALI  
Order: Dragonflies, ODANATA  
Insects, DIPTERA  
Organ: Plant, PISTIL  
Ornament: Shoulder, EPAULET  
Overcoat: Military, CAPOTE  
Ox: Wild, BANTENG  
Oxidation: Bronze or copper, PATINA  
Paralysis: Incomplete, PARESIS  
Pear: Alligator, AVOCADO  
Persimmon: Mexican, CHAPOTE  
Pipe: Peace, CALUMET  
Plaid (Scotch), TARTAN  
Plain, PAMPAS, STEPPE, TUNDRA  
Plant: Buttercup family, ANEMONE  
Century, MAGUEY  
On rocks, LICHEN  
Plowing: Fit for, ARABLE  
Poem: Heroic, EPOPEE  
Six-lined, SESTET  
Point: Highest, ZENITH  
Potion: Love, PHILTRE, PHILTRE  
Protozoan, AMOEBA  
Punish, AMERCE  
Purple (heraldry), PURPURE  
Queen: Fairy, TITANIA  
Race: Skiing, SLALOM  
Rat, BANDICOOT, LEMMING  
Retort, RIPOST, RIPOSTE  
Ring: Harness, TERRET  
Little, ANNULET  
Rodent: Jumping, JERBOA  
Spanish American, AGOUTI, AGOUTY  
Sailor: East Indian, LASCAR  
Salmon: Young, GRILSE  
Salutation: Eastern, SALAAM  
Sandpiper, PLOVER  
Sandy, ARENOSE  
Sapodilla, SAPOTA, SAPOTE  
Saw: Surgical, TREPAN  
Seven: Group of, HEPTAD  
Sexes: Common to both, EPICENE  
Shawl: Mexican, SERAPE  
Sheathing: Flower, SPATHE  
Sheep: Wild, AOUDAD, ARGALI  
Shipworm, TEREDO  
Shoes: Mercury's winged, TALARIA  
Shortening: Syllable, SYSTOLE  
Shrub, SPIRAEA  
Sickle-shaped, FALCATE  
Silver (heraldry), ARGENT  
Snake, ANACONDA  
Speech: Loss of, APHASIA  
Spiral, HELICAL  
Staff: Bishop's, CROSIER, CROZIER



Stalk: Plant, PETIOLE  
 State: Swiss, CANTON  
 Studio, ATELIER  
 Swan: Young, CYGNET  
 Swimming, NATANT  
 Sword-shaped, ENSATE  
 Terminal: Negative, CATHODE  
 Third (music), TIERCE  
 Thrust: Fencing, RIPOST, RIPOSTE  
 Tile: Pertaining to, TEGULAR  
 Tomb: Empty, CENOTAPH  
 Tooth (comb. form), ODONTO  
 Tower: Mohammedan, MINARET  
 Tree: African timber, BAOBAB  
       Black gum, TUPELO  
       East Indian, MARGOSA  
       Locust, ACACIA  
       Malayan, SINTOC  
       Marmalade, SAPOTE  
 Urn: Tea, SAMOVAR  
 Vehicle, LANDAU, TROIKA

Verbose, PROLIX  
 Viceroy: Egyptian, KHEDIVE  
 Vulture: American, CONDOR  
 Warehouse (French), ENTREPOT  
 Whale: White, BELUGA  
 Whirlpool, VORTEX  
 Will: Addition to, CODICIL  
       Having left, TESTATE  
 Wind, CHINOOK, MONSOON, SIMOON,  
       SIMOON, SIROCCO  
 Window: In roof, DORMER  
 Wine, BARBERA, BURGUNDY, CABER-  
       NET, CHABLIS, CHIANTI, CLARET,  
       MUSCATEL, RIESLING, SAUTERNE,  
       SHERRY, ZINFANDEL  
 Wolfish, LUPINE  
 Woman: Boisterous, TERMAGANT  
 Woolly, LANATE  
 Workshop, ATELIER  
 Zoroastrian, PARSEE

## Old-Testament Names

(We do not pretend that this list is all-inclusive. We include only those names which in our opinion one meets most often in crossword puzzles.)

AARON: First high priest of Jews; son of Amram; brother of Miriam and Moses; father of Abihu, Eleazer, Ithamar, and Nadab.

ABEL: Son of Adam; slain by Cain.

ABIGAIL: Wife of Nabal; later, wife of David.

ABIHU: Son of Aaron.

ABIMELECH: King of Gerar.

ABNER: Commander of army of Saul and Ishbosheth; slain by Joab.

ABRAHAM (or ABRAM): Patriarch; forefather of the Jews; son of Terah; husband of Sarah; father of Isaac and Ishmael.

ABSALOM: Son of David and Maacah; revolted against David; slain by Joab.

ACHISH: King of Gath; gave refuge to David.

ACHSA (or ACHSAH): Daughter of Caleb; wife of Othniel.

ADAH: Wife of Lamech.

ADAM: First man; husband of Eve; father of Cain, Abel, and Seth.

ADONIJAH: Son of David and Haggith.

AGAG: King of Amalek; spared by Saul; slain by Samuel.

AHASUERUS: King of Persia; husband of Vashti and, later, Esther; sometimes identified with Xerxes the Great.

AHIJAH: Prophet; foretold accession of Jeroboam.

AHINOAM: Wife of David.

AMASA: Commander of army of David; slain by Joab.

AMNON: Son of David and Ahinoam; ravished Tamar; slain by Absalom.

AMRAM: Husband of Jochebed; father of Aaron, Miriam and Moses.

ASENATH: Wife of Joseph.

ASHER: Son of Jacob and Zilpah.

BALAAM: Prophet; rebuked by his donkey for cursing God.

BARAK: Jewish captain; associated with Deborah.

BARUCH: Secretary to Jeremiah.

BATHSHEBA: Wife of Uriah; later, wife of David.

BELSHAZZAR: Crown prince of Babylon.

BENAIAH: Warrior of David; proclaimed Solomon King.

BEN-HADAD: Name of several kings of Damascus.

BENJAMIN: Son of Jacob and Rachel.

BEZALEEL: Chief architect of tabernacle.

BILDAD: Comforter of Job.

BILBAH: Servant of Rachel; mistress of Jacob.

BOAZ: Husband of Ruth; father of Obed.

CAIN: Son of Adam and Eve; slayer of Abel; father of Enoch.

CAINAN: Son of Enos.

CALEB: Spy sent out by Moses to visit Canaan; father of Achsa.

CANAAN: Son of Ham.

CHILION: Son of Elimelech; husband of Orpah.

CUSH: Son of Ham; father of Nimrod.

DAN: Son of Jacob and Bilhah.

DANIEL: Prophet; saved from lions by God.

DEBORAH: Hebrew prophetess; helped Israelites conquer Canaanites.

DELILAH: Mistress and betrayer of Samson.

ELAM: Son of Shem.

ELEAZAR: Son of Aaron; succeeded him as high priest.

ELI: High priest and judge; teacher of Samuel; father of Hophni and Phinehas.

ELIAKIM: Chief minister of Hezekiah.

ELIEZER: Servant of Abraham.

ELIHU: Comforter of Job.

**ELIJAH** (or **ELIAS**): Prophet; went to heaven in chariot of fire.

**ELIMELECH**: Husband of Naomi; father of Chilion and Mahlon.

**ELIPHAZ**: Comforter of Job.

**ELISHA** (or **ELISEUS**): Prophet; successor of Elijah.

**ELKANAH**: Husband of Hannah; father of Samuel.

**ENOCH**: Son of Cain.

**ENOCH**: Father of Methuselah.

**ENOS**: Son of Seth; father of Cainan.

**EPHRAIM**: Son of Joseph.

**ESAU**: Son of Isaac and Rebecca; sold his birthright to his brother Jacob.

**ESTHER**: Jewish wife of Ahasuerus; saved Jews from Haman's plotting.

**EVE**: First woman; created from rib of Adam.

**EZRA** (or **ESDRAS**): Hebrew scribe and priest.

**GAD**: Son of Jacob and Zilpah.

**GEHAZI**: Servant of Elisha.

**GIDEON**: Israelite hero; defeated Midianites.

**GOLIATH**: Philistine giant; slain by David.

**HAGAR**: Handmaid of Sarah; concubine of Abraham; mother of Ishmael.

**HAGGITH**: Mother of Adonijah.

**HAM**: Son of Noah; father of Cush, Mizraim, Phut, and Canaan.

**HAMAN**: Chief minister of Ahasuerus; hanged on gallows prepared for Mordecai.

**HANNAH**: Wife of Elkanah; mother of Samuel.

**HANUN**: King of Ammonites.

**HARAN**: Brother of Abraham; father of Lot.

**HAZAEI**: King of Damascus.

**HEPHZI-BAH**: Wife of Hezekiah; mother of Mannaseh.

**HIRAM**: King of Tyre.

**HOLOFERNES**: General of Nebuchadnezzar; slain by Judith.

**HOPHNI**: Son of Eli.

**ISAAC**: Hebrew patriarch; son of Abraham and Sarah; half brother of Ishmael; husband of Rebecca; father of Esau and Jacob.

**ISHMAEL**: Son of Abraham and Hagar; half brother of Isaac.

**ISSACHAR**: Son of Jacob and Leah.

**ITHAMAR**: Son of Aaron.

**JABAL**: Son of Lamech and Adah.

**JABIN**: King of Hazor.

**JACOB**: Hebrew patriarch, founder of Israel; son of Isaac and Rebecca; husband of Leah and Rachel; father of Asher, Benjamin, Dan, Gad, Issachar, Joseph, Judah, Levi, Naphtali, Reuben, Simeon, and Zebulun.

**JAEL**: Slayer of Sisera.

**JAPHETH**: Son of Noah.

**JEHOIADA**: High priest; husband of Jehoshabeath; revolted against Athaliah and made Joash King of Judah.

**JEHOSHABEATH** (or **JEHOSHEBA**): Daughter of Jehoram of Judah; wife of Jeholada.

**JEPHTHAH**: Judge in Israel; sacrificed his only daughter because of vow.

**JESSE**: Son of Obed; father of David.

**JETHRO**: Midianite priest; father of Zipporah.

**JEZEBEL**: Phoenician princess; wife of Ahab; mother of Ahaziah, Athaliah, and Jehoram.

**JOAB**: Commander in chief under David; slayer of Abner, Absalom, and Amasa.

**JOB**: Patriarch; underwent many afflictions; comforted by Bildad, Eliphaz and Zophar.

**JOCHEBED**: Wife of Amram.

**JONAH**: Prophet; cast into sea and swallowed by great fish.

**JONATHAN**: Son of Saul; friend of David.

**JOSEPH**: Son of Jacob and Rachel; sold into slavery by his brothers; husband of Asenath; father of Ephraim and Manassah.

**JOSHUA**: Successor of Moses; son of Nun.

**JUBAL**: Son of Lamech and Adah.

**JUDAH**: Son of Jacob and Leah.

**JUDITH**: Slayer of Holofernes.

**KISH**: Father of Saul.

**LABAN**: Father of Leah and Rachel.

**LAMECH**: Son of Methuselah; father of Noah.

**LAMECH**: Husband of Adah and Zillah; father of Jabal, Jubal, and Tubal-Cain.

**LEAH**: Daughter of Laban; wife of Jacob.

**LEVI**: Son of Jacob and Leah.

**LOT**: Son of Haran; escaped destruction of Sodom.

**MAACAH**: Mother of Absalom and Tamar.

**MAHLON**: Son of Elimelech; first husband of Ruth.

**MANASSEH**: Son of Joseph.

**MELCHIZEDEK**: King of Salem.

**METHUSELAH**: Patriarch; son of Enoch; father of Lamech.

**MICHAL**: Daughter of Saul; wife of David.

**MIRIAM**: Prophetess; daughter of Amram; sister of Aaron and Moses.

**MIZRAIM**: Son of Ham.

**MORDECAI**: Uncle of Esther; with her aid, saved Jews from Haman's plotting.

**MOSES**: Prophet and lawgiver; son of Amram; brother of Aaron and Miriam; husband of Zipporah.

**NAAMAN**: Syrian captain; cured of leprosy by Elisha.

**NABAL**: Husband of Abigail.

**NABOTH**: Owner of vineyard; stoned to death because he would not sell it to Ahab.

**NADAB**: Son of Aaron.

**NAHOR**: Father of Terah.

**NAOMI:** Wife of Elimelech; mother-in-law of Ruth.

**NAPHTALI:** Son of Jacob and Bilhah.

**NATHAN:** Prophet; reproved David for causing Uriah's death.

**NEBUCHADNEZZAR** (or **NEBUCHADREZZAR**): King of Babylon; destroyer of Jerusalem.

**NEHEMIAH:** Jewish leader; empowered by Artaxerxes to rebuild Jerusalem.

**NIMROD:** Mighty hunter; son of Cush.

**NOAH:** Patriarch; Son of Lamech; escaped Deluge by building Ark; father of Ham, Japheth and Shem.

**NUN** (or **NON**): Father of Joshua.

**OBE:** Son of Boaz; father of Jesse.

**OG:** King of Bashan.

**ORPAH:** Wife of Chilion.

**OTHNIEL:** Kenezite; judge of Israel; husband of Achsa.

**PHINEHAS:** Son of Eleazar.

**PHINEHAS:** Son of Eli.

**PHUT** (or **PUT**): Son of Ham.

**POTIPHAR:** Egyptian official; bought Joseph.

**RACHEL:** Wife of Jacob.

**REBECCA** (or **REBEKAH**): Wife of Isaac.

**REUBEN:** Son of Jacob and Leah.

**RUTH:** Wife of Mahlon, later of Boaz; daughter-in-law of Naomi.

**SAMSON:** Judge of Israel; famed for strength; betrayed by Delilah.

**SAMUEL:** Hebrew judge and prophet; son of Elkanah.

**SARAH** (or **SARA**, **SARAI**): Wife of Abraham.

**SENNACHERIB:** King of Assyria.

**SETH:** Son of Adam; father of Enos.

**SHEM:** Son of Noah; father of Elam.

**SIMEON:** Son of Jacob and Leah.

**SISERA:** Canaanite captain; slain by Jael.

**TAMAR:** Daughter of David and Maachah; ravished by Amnon.

**TERAH:** Son of Nahor; father of Abraham.

**TUBAL-CAIN:** Son of Lamech and Zillah.

**URIAH:** Husband of Bathsheba; sent to death in battle by David.

**VASHTI:** Wife of Ahasuerus; set aside by him.

**ZADOK:** High priest during David's reign.

**ZEBULUN** (or **ZABULON**): Son of Jacob and Leah.

**ZILLAH:** Wife of Lamech.

**ZILPAH:** Servant of Leah; mistress of Jacob.

**ZIPPORAH:** Daughter of Jethro; wife of Moses.

**ZOPHAR:** Comforter of Job.

## Kings of Judah and Israel

### Kings Before Division of Kingdom

**SAUL:** First King of Israel; son of Kish; father of Ish-Bosheth, Jonathan and Michal.

**ISH-BOSHETH** (or **ESHBAAL**): King of Israel; son of Saul.

**DAVID:** King of Judah; later of Israel; son of Jesse; husband of Abigail, Ahinoam, Bathsheba, Michal, etc.; father of Absalom, Adonijah, Amnon, Solomon, Tamar, etc.

**SOLOMON:** King of Israel and Judah; son of David; father of Rehoboam.

**REHOBAM:** Son of Solomon; during his reign the kingdom was divided into Judah and Israel.

### Kings of Judah (Southern Kingdom)

**REHOBAM:** First King.

**ABIJAH** (or **ABIJAM** or **ABIA**): Son of Rehoboam.

**ASA:** Probably son of Abijah.

**JEHOSHAPHAT:** Son of Asa.

**JEHORAM** (or **JORAM**): Son of Jehoshaphat; husband of Athaliah.

**AHAZIAH:** Son of Jehoram and Athaliah.

**ATHALIAH:** Daughter of King Ahab of Israel and Jezebel; wife of Jehoram.

**JOASH** (or **JEHOASH**): Son of Ahaziah.

**AMAZIAH:** Son of Joash.

**UZZIAH** (or **AZARIAH**): Son of Amaziah.

**JOTHAM:** Regent, later King; son of Uzziah.

**AHAZ:** Son of Jotham.

**HEZEKIAH:** Son of Ahab; husband of Hephzi-Bah.

**MANASSEH:** Son of Hezekiah and Hephzi-Bah.

**AMON:** Son of Manasseh.

**JOSIAH** (or **JOSIAS**): Son of Amon.

**JEHOAHAZ** (or **JOAHAZ**): Son of Josiah.

**JEHOIAKIM:** Son of Josiah.

**JEHOIACHIN:** Son of Jehoiakim.

**ZEDEKIAH:** Son of Josiah; kingdom overthrown by Babylonians under Nebuchadnezzar.

### Kings of Israel (Northern Kingdom)

**JEROBOAM I:** Led secession of Israel.

**NADAB:** Son of Jeroboam I.

**BAASHA:** Overthrew Nadab.

**ELAH:** Son of Baasha.

**ZIMRI:** Overthrew Elah.

**OMRI:** Overthrew Zimri.

**AHAB:** Son of Omri; husband of Jezebel.

**AMAZIAH:** Son of Ahab.

**JEHORAM** (or **JORAM**): Son of Ahab.

**JEHU:** Overthrew Jehoram.

**JEHOAHAZ** (or **JOAHAZ**): Son of Jehu.

**JEHOASH** (or **JOASH**): Son of Jehoahaz.



JEROBOAM II: Son of Jehoash.  
 ZECHARIAH: Son of Jeroboam II.  
 SHALLUM: Overthrew Zechariah.  
 MENAHEM: Overthrew Shallum.

PEKAHIAH: Son of Menahem.  
 PEKAH: Overthrew Pekahiah.  
 HOSHEA: Overthrew Pekah; kingdom  
 overthrown by Assyrians under Sargon II.

## Prophets

### Major

ISAIAH

JEREMIAH

EZEKIEL

DANIEL

### Minor

HOSEA

OBADIAH

NAHUM

HAGGAI

JOEL

JONAH

HABAKKUK

ZECHARIAH

AMOS

MICAH

ZEPHANIAH

MALACHI

## Foreign Phrases

(NOTE: The English meanings given are not necessarily literal translations.)

AB OVO: From the beginning.  
 ABSIT OMEN: Hope this is no bad luck.  
 AEQUO ANIMO: Undisturbed in mind.  
 AD VALOREM: According to its value.  
 ALEA JACTA EST: The die is cast.  
 ALMA MATER: One's college or school.  
 ALTER EGO: Other self.  
 AMICUS CURIAE: Friend of the court.  
 ANNO DOMINI: Year of our Lord.  
 BEL CANTO: A style of singing marked  
 by virtuosity and beauty.

BETE NOIRE: Particular nemesis.  
 BONA FIDE: In good faith; genuine.  
 CARPE DIEM: Enjoy today.  
 CASUS BELLI: Cause of war.  
 CAVEAT EMPTOR: Buy at your own  
 risk.

CORPUS DELICTI: Fundamental fact or  
 facts necessary to commission of a crime.  
 CUI BONO: To whose advantage?  
 CUM GRANO SALIS: With a grain of  
 salt.

DE FACTO: As a matter of fact; because  
 of this fact.

DEO GRATIAS: Thanks be to God.  
 DEUS EX MACHINA: Artificially pro-  
 duced to bring a solution of some extreme  
 difficulty.

ECCE HOMO: This is the man.  
 ERRARE HUMANUM (EST): To err is  
 human.

FESTINALENTE: Make haste slowly.  
 FIAT LUX: Let there be light.  
 FIDUS ACHATES: Faithful friend.  
 FLAGRANTE DELICTO: Caught in the  
 act.

HABEAS CORPUS: Common-law writ to  
 bring a person before a court or judge.

HIC JACET: Here lies. . . .  
 HOI POLLOI: The common people.  
 HONORIS CAUSA: For the sake of  
 honor.

HORS D'OEUVRES: Side dishes.  
 IN VINO VERITAS: In wine there is  
 truth.

IPSE DIXIT: An assertion made but not  
 proved.

IPSO FACTO: By the very fact.  
 JEUNESSE DOREE: Gilded youth.  
 LABOR OMNIA VINCIT: Work over-  
 comes all things.

LAISSEZ FAIRE: Noninterference.  
 MIRABILE DICTU: Wonderful to relate.  
 MULTUM IN PARVO: Much in little.  
 NIL ADMIRARI: To be astonished at  
 nothing.

NOLENS, VOLENS: Willy-nilly.  
 O TEMPORA! O MORES!: What sad  
 times and customs!

PERSONA GRATA: A favored person.  
 POST MORTEM: After death.  
 PRO BONO PUBLICO: For the public  
 welfare.

PRO TEMPORE: For the time being.  
 RARA AVIS: Extraordinary person or  
 thing.

REQUIESCAT IN PACE: Rest in peace.  
 SAVOIR FAIRE: Know-how; manners  
 for all occasions.

SINE DIE: With no day set for the next  
 meeting.

SINE QUA NON: Indispensable.  
 SPIRITUS FRUMENTI: Alcohol.  
 STATUS (IN) QUO: State in which any-  
 thing is.

SUI GENERIS: In a class by itself.  
 SURSUM CORDA: Lift up your hearts.  
 TEMPUS FUGIT: Time flies.  
 ULTIMA THULE: The limit in an ideal  
 way.

VAE VICTIS: Woe to the conquered.  
 VENI, VIDI, VICI: I came, I saw, I  
 conquered.

## Greek and Roman Mythology

(Most of the Greek deities were adopted by the Romans, although in many cases there was a change of name. In the list below, information is given under the Greek name; the name in parentheses is the Latin equivalent. However, all Latin names are listed with cross references to the Greek ones. In addition, there are several deities which were exclusively Roman.)

**ACHERON:** *See* Rivers.

**ACHILLES:** Greek warrior; slew Hector at Troy; slain by Paris, who wounded him in his vulnerable heel.

**ACTAEON:** Hunter; surprised Artemis bathing; changed by her to stag and killed by his dogs.

**ADMETUS:** King of Thessaly; his wife, Alcestis, offered to die in his place.

**ADONIS:** Beautiful youth loved by Aphrodite.

**AEACUS:** One of three judges of dead in Hades; son of Zeus.

**AEETES:** King of Colchis; father of Medea; keeper of Golden Fleece.

**AEGEUS:** Father of Theseus; believing Theseus killed in Crete, he drowned himself, Aegean Sea named for him.

**AEGISTHUS:** Son of Thyestes; slew Atreus; with Clytemnestra, his paramour, slew Agamemnon; slain by Orestes.

**AEGYPTUS:** Brother of Danaüs; his sons, except Lynceus, slain by Danaides.

**AENEAS:** Trojan; son of Anchises and Aphrodite; after fall of Troy, led his followers eventually to Italy; loved and deserted Dido.

**AEOLUS:** *See* Winds.

**AESCLAPIUS:** *See* Asclepius.

**AESON:** King of Ioclus; father of Jason; overthrown by his brother Pelias; restored to youth by Medea.

**AETHER:** Personification of sky.

**AETHRA:** Mother of Theseus.

**AGAMEMNON:** King of Mycenae; son of Atreus; brother of Menelaus; leader of Greeks against Troy; slain on his return home by Clytemnestra and Aegisthus.

**AGLAIA:** *See* Graces.

**AJAX:** Greek warrior; killed himself at Troy because Achilles' armor was awarded to Odysseus.

**ALCESTIS:** Wife of Admetus; offered to die in his place but saved from death by Hercules.

**ALCMENE:** Wife of Amphitryon; mother by Zeus of Hercules.

**ALCYONE:** *See* Pleiades.

**ALECTO:** *See* Furies.

**ALECTRYON:** Youth changed by Ares into cock.

**ALTHAEA:** Wife of Oeneus; mother of Meleager.

**AMAZONS:** Female warriors in Asia Minor; supported Troy against Greeks.

**AMOR:** *See* Eros.

**AMPHION:** Musician; husband of Niobe; charmed stones to build fortifications for Thebes.

**AMPHITRITE:** Sea goddess; wife of Poseidon.

**AMPHITRYON:** Husband of Alcmene.

**ANCHISES:** Father of Aeneas.

**ANCILE:** Sacred shield that fell from heavens; palladium of Rome.

**ANDRAEMON:** Husband of Dryope.

**ANDROMACHE:** Wife of Hector.

**ANDROMEDA:** Daughter of Cepheus; chained to cliff for monster to devour; rescued by Perseus.

**ANTEIA:** Wife of Proetus; tried to induce Bellerophon to elope with her.

**ANTEROS:** God who avenged unrequited love.

**ANTIGONE:** Daughter of Oedipus; accompanied him to Colonus; performed burial rite for Polynices and was buried alive.

**ANTINOÜS:** Leader of suitors of Penelope; slain by Odysseus.

**APHRODITE (VENUS):** Goddess of love and beauty; daughter of Zeus; mother of Eros.

**APOLLO:** God of beauty, poetry, music; later identified with Helios as Phoebus Apollo; son of Zeus and Leto.

**AQUILUS:** *See* Winds.

**ARACHNE:** Maiden who challenged Athena to weaving contest; changed to spider.

**ARES (MARS):** God of war; son of Zeus and Hera.

**ARGO:** Ship in which Jason and followers sailed to Colchis for Golden Fleece.

**ARGUS:** Monster with hundred eyes; slain by Hermes; his eyes placed by Hera into peacock's tail.

**ARIADNE:** Daughter of Minos; aided Theseus in slaying Minotaur; deserted by him on island of Naxos and married to Dionysus.

**ARION:** Musician; thrown overboard by pirates but saved by dolphin.

**ARTEMIS (DIANA):** Goddess of moon; huntress; twin sister of Apollo.

**ASCLEPIUS (AESCLAPIUS):** Mortal son of Apollo; slain by Zeus for raising dead; later deified as god of medicine. Also known as Asclepios.

**ASTARTE:** Phoenician goddess of love; variously identified with Aphrodite, Selene, and Artemis.

**ASTRAEA:** Goddess of Justice; daughter of Zeus and Themis.

**ATALANTA:** Princess who challenged her suitors to a foot race; Hippomenes won race and married her.

**ATHENA (MINERVA):** Goddess of wisdom; known poetically as Pallas Athene; sprang fully armed from head of Zeus.

**ATLAS:** Titan; held world on his shoulders as punishment for warring against Zeus; son of Iapetus.

**ATREUS:** King of Mycenae; father of Menelaus and Agamemnon; brother of Thyestes, three of whose sons he slew and served to him at banquet; slain by Aegisthus.

**ATROPOS:** *See* Fates.

**AURORA:** *See* Eos.

**AUSTER:** *See* Winds.

**AVERNUS:** Infernal regions; name derived from small vaporous lake near Vesuvius which was fabled to kill birds and vegetation.

**BACCHUS:** *See* Dionysus.

**BELLEROPHON:** Corinthian hero; killed Chimera with aid of Pegasus; tried to reach Olympus on Pegasus and was thrown to his death.

**BELLONA:** Roman goddess of war.

**BOREAS:** *See* Winds.

**BRIAREUS:** Monster of hundred hands; son of Uranus and Gaea.

**BRISEIS:** Captive maiden given to Achilles; taken by Agamemnon in exchange for loss of Chryseis, which caused Achilles to cease fighting, until death of Patroclus.

**CADMUS:** Brother of Europa; planter of dragon seeds from which first Thebans sprang.

**CALLIOPE:** *See* Muses.

**CALYPSO:** Sea nymph; kept Odysseus on her island Ogygia for seven years.

**CASSANDRA:** Daughter of Priam; prophetess who was never believed; slain with Agamemnon.

**CASTOR:** *See* Dioscuri.

**CELAENO:** *See* Pleiades.

**CENTAURS:** Beings half man and half horse; lived in mountains of Thessaly.

**CEPHALUS:** Hunter; accidentally killed his wife Procris with his spear.

**CEPHEUS:** King of Ethiopia; father of Andromeda.

**CERBERUS:** Three-headed dog guarding entrance to Hades.

**CERES:** *See* Demeter.

**CHAOS:** Formless void; personified as first of gods.

**CHARON:** Boatman on Styx who carried souls of dead to Hades; son of Erebus.

**CHARYBDIS:** Female monster; personification of whirlpool.

**CHIMERA:** Female monster with head of lion, body of goat, tail of serpent; killed by Bellerophon.

**CHIRON:** Most famous of centaurs.

**CHRONOS:** Personification of time.

**CHRYSEIS:** Captive maiden given to Agamemnon; his refusal to accept ransom from her father Chryses caused Apollo to send plague on Greeks besieging Troy.

**CIRCE:** Sorceress; daughter of Helios; changed Odysseus' men into swine.

**CLIO:** *See* Muses.

**CLOTHO:** *See* Fates.

**CLYTEMNESTRA:** Wife of Agamemnon, whom she slew with aid of her paramour, Aegisthus; slain by her son Orestes.

**COCYTUS:** *See* Rivers.

**CREON:** Father of Jocasta; forbade burial of Polynices; ordered burial alive of Antigone.

**CREÜSA:** Princess of Corinth, for whom Jason deserted Medea; slain by Medea, who sent her poisoned robe; also known as Glauke.

**CREÜSA:** Wife of Aeneas; died fleeing Troy.

**CRONUS (SATURN):** Titan; god of harvests; son of Uranus and Gaea; dethroned by his son Zeus.

**CUPID:** *See* Eros.

**CYBELE:** Anatolian nature goddess; adopted by Greeks and identified with Rhea.

**CYCLOPES:** Race of one-eyed giants (singular: Cyclops).

**DAEDALUS:** Athenian artificer; father of Icarus; builder of Labyrinth in Crete; devised wings attached with wax for him and Icarus to escape Crete.

**DANAË:** Princess of Argos; mother of Perseus by Zeus, who appeared to her in form of golden shower.

**DANAÏDES:** Daughters of Danaüs; at his command, all except Hypermnestra slew their husbands, the sons of Aegyptus.

**DANAÜS:** Brother of Aegyptus; father of Danaïdes; slain by Lynceus.

**DAPHNE:** Nymph; pursued by Apollo; changed to laurel tree.

**DECUMA:** *See* Fates.

**DEINO:** *See* Graeae.

**DEMETER (CERES):** Goddess of agriculture; mother of Persephone.

**DIANA:** *See* Artemis.

**DIDO:** Founder and queen of Carthage; stabbed herself when deserted by Aeneas.

**DIOMEDES:** Greek hero; with Odysseus, entered Troy and carried off Palladium, sacred statue of Athena.

**DIOMEDES:** Owner of man-eating horses, which Hercules, as ninth labor, carried off.



**DIONE:** Titan goddess; mother by Zeus of Aphrodite.

**DIONYSUS (BACCHUS):** God of wine; son of Zeus and Semele.

**DIOSCURI:** Twins Castor and Pollux; sons of Leda by Zeus.

**DIS:** See Hades.

**DRYADS:** Wood nymphs.

**DRYPOE:** Maiden changed to Hamadryad.

**ECHO:** Nymph who fell hopelessly in love with Narcissus; faded away except for her voice.

**ELECTRA:** Daughter of Agamemnon and Clytemnestra; sister of Orestes; urged Orestes to slay Clytemnestra and Aegisthus.

**ELECTRA:** See Pleiades.

**ELYSIUM:** Abode of blessed dead.

**ENDYMION:** Mortal loved by Selene.

**ENYO:** See Graeae.

**EOS (AURORA):** Goddess of dawn.

**EPIMETHEUS:** Brother of Prometheus; husband of Pandora.

**ERATO:** See Muses.

**EREBUS:** Spirit of darkness; son of Chaos.

**ERINYES:** See Furies.

**ERIS:** Goddess of discord.

**EROS (AMOR or CUPID):** God of love; son of Aphrodite.

**ETEOCLES:** Son of Oedipus, whom he succeeded to rule alternately with Polynices; refused to give up throne at end of year; he and Polynices slew each other.

**EUMENIDES:** See Furies.

**EUPHROSYNE:** See Graces.

**EUROPA:** Mortal loved by Zeus, who, in form of white bull, carried her off to Crete.

**EURUS:** See Winds.

**EURYALE:** See Gorgons.

**EURYDICE:** Nymph; wife of Orpheus.

**EURYSTHEUS:** King of Argos; imposed twelve labors on Hercules.

**EUTERPE:** See Muses.

**FATES:** Goddesses of destiny: Clotho (Spinner of thread of life), Lachesis (Determiner of length), and Atropos (Cutter of thread); also called Moirae. Identified by Romans with their goddesses of fate; Nona, Decuma, and Morta; called Parcae.

**FAUNS:** Roman deities of woods and groves.

**FAUNUS:** See Pan.

**FAVONIUS:** See Winds.

**FLORA:** Roman goddess of flowers.

**FORTUNA:** Roman goddess of fortune.

**FURIES:** Avenging spirits: Alecto, Megaera, and Tisiphone; known also as Erinyes or Eumenides.

**GAEA:** Goddess of earth; daughter of Chaos; mother of Titans; known also as Ge, Gaia, Gaea, etc.

**GALATEA:** Statue of maiden carved from ivory by Pygmalion; given life by Aphrodite.

**GALATEA:** Sea nymph; loved by Polyphemus.

**GANYMEDE:** Beautiful boy; successor to Hebe as cupbearer of gods.

**GLAUCUS:** Mortal who became sea divinity by eating magic grass.

**GLAUKE:** See Creusa.

**GOLDEN FLEECE:** Fleece from ram that flew Phrixos to Colchis; Aeëtes placed it under guard of dragon; carried off by Jason.

**GORGONS:** Female monsters: Euryale, Medusa, and Stheno; had snakes for hair; their glances turned mortals to stone. See Medusa.

**GRACES:** Beautiful goddesses: Aglaia (Brilliance), Euphrosyne (Joy), and Thalia (Bloom); daughters of Zeus.

**GRAEAE:** Sentinels for Gorgons: Deino, Enyo, and Pephredo; had one eye among them, which passed from one to another.

**HADES (DIS):** Name sometimes given Pluto; also, abode of dead, ruled by Pluto.

**HAEMON:** Son of Creon; promised husband of Antigone; killed himself in her tomb.

**HAMADRYADS:** Tree nymphs; lived and died with trees they inhabited.

**HARPIES:** Monsters with heads of women and bodies of birds.

**HEBE (JUVENTAS):** Goddess of youth; cupbearer of gods before Ganymede; daughter of Zeus and Hera.

**HECATE:** Goddess of sorcery and witchcraft.

**HECTOR:** Son of Priam; slayer of Patroclus; slain by Achilles.

**HECUBA:** Wife of Priam.

**HELEN:** Fairest woman in world; daughter of Zeus and Leda; wife of Menelaus; carried to Troy by Paris, causing Trojan War.

**HELIADES:** Daughters of Helios; mourned for Phaëthon and were changed to poplar trees.

**HELIOS (SOL):** God of sun; later identified with Phoebus Apollo.

**HELLE:** Sister of Phrixos; fell from ram of Golden Fleece; water where she fell named Hellespont.

**HEPHAESTUS (VULCAN):** God of fire; celestial blacksmith; son of Zeus and Hera; husband of Aphrodite.

**HERA (JUNO):** Queen of heaven; wife of Zeus.

**HERCULES:** Hero and strong man; son of Zeus and Alcmena; performed twelve

labors or deeds to be free from bondage under Eurystheus; after death, his mortal share was destroyed, and he became immortal. Also known as Herakles or Heracles. Labors: (1) killing Nemean lion; (2) killing Lernaean Hydra; (3) capturing Erymanthian boar; (4) capturing Cerynean hind; (5) killing man-eating Stymphalian birds; (6) procuring girdle of Hippolyte; (7) cleaning Augean stables; (8) capturing Cretan bull; (9) capturing man-eating horses of Diomedes; (10) capturing cattle of Geryon; (11) procuring golden apples of Hesperides; (12) bringing Cerberus up from Hades.

**HERMES (MERCURY):** God of physicians and thieves; messenger of gods; son of Zeus and Maia.

**HERO:** Priestess of Aphrodite; Leander swam Hellespont nightly to see her; drowned herself at his death.

**HESPERUS:** Evening star.

**HESTIA (VESTA):** Goddess of hearth; sister of Zeus.

**HIPPOLYTE:** Queen of Amazons; wife of Theseus.

**HIPPOLYTUS:** Son of Theseus and Hippolyte; falsely accused by Phaedra of trying to kidnap her; slain by Poseidon at request of Theseus.

**HIPPOMENES:** Husband of Atalanta, whom he beat in foot race by dropping golden apples, which she stopped to pick up.

**HYACINTHUS:** Beautiful youth accidentally killed by Apollo, who caused flower to spring up from his blood.

**HYDRA:** Nine-headed monster in marsh of Lerna; slain by Hercules.

**HYGEIA:** Personification of health.

**HYMEN:** God of marriage.

**HYPERION:** Titan; early sun god; father of Helios.

**HYPERMNESTRA:** Daughter of Danaüs; refused to kill her husband Lynceus.

**HYPNOS (SOMNUS):** God of sleep.

**IAPETUS:** Titan; father of Atlas, Epimetheus, and Prometheus.

**ICARUS:** Son of Daedalus; flew too near sun with wax-attached wings and fell into sea and was drowned.

**IO:** Mortal maiden loved by Zeus; changed by Hera into heifer.

**IOBATES:** King of Lycia; sent Bellerophon to slay Chimera.

**IPHIGENIA:** Daughter of Agamemnon; offered as sacrifice to Artemis at Aulis; carried by Artemis to Tauris where she became priestess; escaped from there with Orestes.

**IRIS:** Goddess of rainbow; messenger of Zeus and Hera.

**ISMENE:** Daughter of Oedipus; sister of Antigone.

**IULUS:** Son of Aeneas.

**IXION:** King of Lapithae; for making love to Hera he was bound to endlessly revolving wheel in Tartarus.

**JANUS:** Roman god of gates and doors; represented with two opposite faces.

**JASON:** Son of Aeson; to gain throne of Ioclus from Pelias, went to Colchis and brought back Golden Fleece; married Medea; deserted her for Creüsa.

**JOCASTA:** Wife of Laius; mother of Oedipus; unwittingly became wife of Oedipus; hanged herself when relationship was discovered.

**JUNO:** See Hera.

**JUPITER:** See Zeus.

**JUVENTAS:** See Hebe.

**LACHESIS:** See Fates.

**LAIUS:** Father of Oedipus, by whom he was slain.

**LAOCOÖN:** Priest of Apollo at Troy; warned against bringing wooden horse into Troy; destroyed with his two sons by serpents sent by Athena.

**LARES:** Roman ancestral spirits protecting descendants and homes.

**LAVINIA:** wife of Aeneas after defeat of Turnus.

**LEANDER:** Swam Hellespont nightly to see Hero; drowned in storm.

**LEDA:** Mortal loved by Zeus in form of Swan; mother of Helen, Clytemnestra, Dioscuri.

**LETHE:** See Rivers.

**LETO (LATONA):** Mother by Zeus of Artemis and Apollo.

**LUCINA:** Roman goddess of childbirth; identified with Juno.

**LYNCEUS:** Son of Aegyptus; husband of Hypermnestra; slew Danaüs.

**MAIA:** Daughter of Atlas; mother of Hermes.

**MAIA:** See Pleiades.

**MANES:** Souls of dead Romans, particularly of ancestors.

**MARS:** See Ares.

**MARSYAS:** Shepherd; challenged Apollo to music contest and lost; flayed alive by Apollo.

**MEDEA:** Sorceress; daughter of Aeëtes; helped Jason obtain Golden Fleece; when deserted by him for Creüsa, killed her children and Creüsa.

**MEDUSA:** Gorgon; slain by Perseus, who cut off her head.

**MEGAERA:** See Furies.

**MELEAGER:** Son of Althaea; his life would last as long as brand burning at his birth; Althaea quenched and saved it but destroyed it when Meleager slew his uncles.

**MELPOMENE:** See Muses.

**MEMNON:** Ethiopian king; made immortal by Zeus; son of Tithonus and Eos.

**MENELAUS:** King of Sparta; son of Atreus; brother of Agamemnon; husband of Helen.

**MERCURY:** See Hermes.

**MEROPE:** See Pleiades.

**MEZENTIUS:** Cruel Etruscan king; ally of Turnus against Aeneas; slain by Aeneas.

**MIDAS:** King of Phrygia; given gift of turning to gold all he touched.

**MINERVA:** See Athena.

**MINOS:** King of Crete; after death, one of three judges of dead in Hades; son of Zeus and Europa.

**MINOTAUR:** Monster, half man and half beast, kept in Labyrinth in Crete; slain by Theseus.

**MNEMOSYNE:** Goddess of memory; mother by Zeus of Muses.

**MOIRAE:** See Fates.

**MOMUS:** God of ridicule.

**MORPHEUS:** God of dreams.

**MORS:** See Thanatos.

**MORTA:** See Fates.

**MUSES:** Goddesses presiding over arts and sciences: Calliope (epic poetry), Clio (history), Erato (lyric and love poetry), Euterpe (music), Melpomene (tragedy), Polymnia or Polyhymnia (sacred poetry), Terpsichore (choral dance and song), Thalia (comedy and bucolic poetry), Urania (astronomy); daughters of Zeus and Mnemosyne.

**NAIADS:** Nymphs of waters, streams, and fountains.

**NAPAEAE:** Wood nymphs.

**NARCISSUS:** Beautiful youth loved by Echo; in punishment for not returning her love, he was made to fall in love with his image reflected in pool; pined away and became flower.

**NEMESIS:** Goddess of retribution.

**NEOPTOLEMUS:** Son of Achilles; slew Priam; also known as Pyrrhus.

**NEPTUNE:** See Poseidon.

**NEREIDS:** Sea nymphs; attendants on Poseidon.

**NESTOR:** King of Pylos; noted for wise counsel in expedition against Troy.

**NIKE:** Goddess of victory.

**NIOBE:** Daughter of Tantalus; wife of Amphion; her children slain by Apollo and Artemis; changed to stone but continued to weep her loss.

**NONA:** See Fates.

**NOTUS:** See Winds.

**NOX:** See Nyx.

**NYMPHS:** Beautiful maidens; inferior deities of nature.

**NYX (NOX):** Goddess of night.

**OCEANIDS:** Ocean nymphs; daughters of Oceanus.

**OCEANUS:** Eldest of Titans; god of waters.

**ODYSSEUS (ULYSSES):** King of Ithaca; husband of Penelope; wandered ten years after fall of Troy before arriving home.

**OEDIPUS:** King of Thebes; son of Laius and Jocasta; unwittingly murdered Laius and married Jocasta; tore his eyes out when relationship was discovered.

**OENONE:** Nymph of Mount Ida; wife of Paris, who abandoned her; refused to cure him when he was poisoned by arrow of Philoctetes at Troy.

**OPS:** See Rhea.

**OREADS:** Mountain nymphs.

**ORESTES:** Son of Agamemnon and Clytemnestra; brother of Electra; slew Clytemnestra and Aegisthus; pursued by Furies until his purification by Apollo.

**ORION:** Hunter; slain by Artemis and made heavenly constellation.

**ORPHEUS:** Famed musician; son of Apollo and Muse Calliope; husband of Eurydice.

**PALES:** Roman goddess of shepherds and herdsmen.

**PALINURUS:** Aeneas' pilot; fell overboard in his sleep and was drowned.

**PAN (FAUNUS):** God of woods and fields; part goat; son of Hermes.

**PANDORA:** Opener of box containing human ills; mortal wife of Epimetheus.

**PARCAE:** See Fates.

**PARIS:** Son of Priam; gave apple of discord to Aphrodite, for which she enabled him to carry off Helen; slew Achilles at Troy; slain by Philoctetes.

**PATROCLUS:** Great friend of Achilles; wore Achilles' armor and was slain by Hector.

**PEGASUS:** Winged horse that sprang from Medusa's body at her death; ridden by Bellerophon when he slew Chimera.

**PELIAS:** King of Iolcus; seized throne from his brother Aeson; sent Jason for Golden Fleece; slain unwittingly by his daughters at instigation of Medea.

**PELOPS:** Son of Tantalus; his father cooked and served him to gods; restored to life; Peloponnesus named for him.

**PENATES:** Roman household gods.

**PENELOPE:** Wife of Odysseus; waited faithfully for him for ten years while putting off numerous suitors.

**PEPHREDO:** See Graeae.

**PERIPHETES:** Giant; son of Hephaestus; slain by Theseus.

**PERSEPHONE (PROSERPINE):** Queen of infernal regions; daughter of Zeus and Demeter; wife of Pluto.

**PERSEUS:** Son of Zeus and Danaë; slew Medusa; rescued Andromeda from monster and married her.

**PHAEDRA:** Daughter of Minos; wife of Theseus; falsely accused Hippolytus of trying to kidnap her.



**PHAETHON:** Son of Helios; drove his father's sun chariot and was struck down by Zeus before he set world on fire.

**PHILOCTETES:** Greek warrior who possessed Hercules' bow and arrows; slew Paris at Troy with poisoned arrow.

**PHINEUS:** Betrothed of Andromeda; tried to slay Perseus but turned to stone by Medusa's head.

**PHLEGETHON:** *See* Rivers.

**PHOSPHOR:** Morning star.

**PHRIXOS:** Brother of Helle; carried by ram of Golden Fleece to Colchis.

**PIRITHOÜS:** Son of Ixion; friend of Theseus; tried to carry off Persephone from Hades; bound to enchanted rock by Pluto.

**PLEIADES:** Alcyone, Celaeno, Electra, Maia, Merope, Sterope or Asterope, Taygeta; seven daughters of Atlas; transformed into heavenly constellation, of which six stars are visible (Merope is said to have hidden in shame for loving a mortal).

**PLUTO (DIS):** God of Hades; brother of Zeus.

**PLUTUS:** God of wealth.

**POLLUX:** *See* Dioscuri.

**POLYMNIA:** *See* Muses.

**POLYNICES:** Son of Oedipus; he and his brother Eteocles killed each other; burial rite, forbidden by Creon, performed by his sister Antigone.

**POLYPHEMUS:** Cyclops; devoured six of Odysseus' men; blinded by Odysseus.

**POLYXENA:** Daughter of Priam; betrothed to Achilles, whom Paris slew at their betrothal; sacrificed to shade of Achilles.

**POMONA:** Roman goddess of fruits.

**PONTUS:** Sea god; son of Gaea.

**POSEIDON (NEPTUNE):** God of sea; brother of Zeus.

**PRIAM:** King of Troy; husband of Hecuba; ransomed Hector's body from Achilles; slain by Neoptolemus.

**PRIAPUS:** God of regeneration.

**PROCRIS:** Wife of Cephalus, who accidentally slew her.

**PROCRUSTES:** Giant; stretched or cut off legs of victims to make them fit iron bed; slain by Theseus.

**PROETUS:** Husband of Anteia; sent Belerophon to Iobates to be put to death.

**PROTEUS:** Sea god; assumed various shapes when called on to prophesy.

**PSYCHE:** Beloved of Eros; punished by jealous Aphrodite; made immortal and united with Eros.

**PYGMALION:** King of Cyprus; carved ivory statue of maiden which Aphrodite gave life as Galatea.

**PYRAMUS:** Babylonian youth; made love to Thisbe through hole in wall; thinking Thisbe slain by lion, killed himself.

**PYRRHUS:** *See* Neoptolemus.

**PYTHON:** Serpent born from slime left by Deluge; slain by Apollo.

**QUIRINUS:** Roman war god.

**REMUS:** Brother of Romulus; slain by him.

**RHADAMANTHUS:** One of three judges of dead in Hades; son of Zeus and Europa.

**RHEA (OPS):** Daughter of Uranus and Gaea; wife of Cronus; mother of Zeus; identified with Cybele.

**RIVERS OF UNDERWORLD:** Acheron (woe), Cocytus (wailing), Lethe (forgetfulness), Phlegethon (fire), Styx (across which souls of dead were ferried by Charon).

**ROMULUS:** Founder of Rome; he and Remus suckled in infancy by she-wolf; slew Remus; deified by Romans.

**SARPEDON:** King of Lycia; son of Zeus and Europa; slain by Patroclus at Troy.

**SATURN:** *See* Cronus.

**SATYRS:** Hoofed demigods of woods and fields; companions of Dionysus.

**SCIRON:** Robber; forced strangers to wash his feet, then hurled them into sea where tortoise devoured them; slain by Theseus.

**SCYLLA:** Female monster inhabiting rock opposite Charybdis; menaced passing sailors.

**SELENE:** Goddess of moon.

**SEMELE:** Daughter of Cadmus; mother by Zeus of Dionysus; demanded Zeus appear before her in all his splendor and was destroyed by his lightnings.

**SIBYLS:** Various prophetesses; most famous, Cumaean sibyl, accompanied Aeneas into Hades.

**SILENI:** Minor woodland deities similar to satyrs (singular: silenus). Sometimes Silenus refers to eldest of satyrs, son of Hermes or of Pan.

**SILVANUS:** Roman god of woods and fields.

**SINIS:** Giant; bent pines, by which he hurled victims against side of mountain; slain by Theseus.

**SIRENS:** Minor deities who lured sailors to destruction with their singing.

**SISYPHUS:** King of Corinth; condemned in Tartarus to roll huge stone to top of hill; it always rolled back down again.

**SOL:** *See* Helios.

**SOMNUS:** *See* Hypnos.

**SPHINX:** Monster of Thebes; killed those who could not answer her riddle\*; slain by Oedipus. Name also refers to other monsters having body of lion, wings, and head and bust of woman.

**STEROPE:** *See* Pleiades.

**STHENO:** *See* Gorgons.

**STYX:** *See* Rivers.

\*What animal goes on 4 feet in morning, 2 at noon, 3 at night? Answer: Man (crawls when child, walks when adult, uses staff when old).

**SYMPLEGADES:** Clashing rocks at entrance to Black Sea; Argo passed through, causing them to become forever fixed.

**SYRINX:** Nymph pursued by Pan; changed to reeds, from which he made his pipes.

**TANTALUS:** Cruel king; father of Pelops and Niobe; condemned in Tartarus to stand chin-deep in lake surrounded by fruit branches; as he tried to eat or drink, water or fruit always receded.

**TARTARUS:** Underworld below Hades; often refers to Hades.

**TAYGETA:** *See* Pleiades.

**TELEMACHUS:** Son of Odysseus; made unsuccessful journey to find his father.

**TELLUS:** Roman goddess of earth.

**TERMINUS:** Roman god of boundaries and landmarks.

**TERPSICHOE:** *See* Muses.

**TERRA:** Roman earth goddess.

**THALIA:** *See* Graces; Muses.

**THANATOS (MORS):** God of death.

**THEMIS:** Titan goddess of laws of physical phenomena; daughter of Uranus; mother of Prometheus.

**THESEUS:** Son of Aegeus; slew Minotaur; married and deserted Ariadne; later married Phaedra.

**THISBE:** Beloved of Pyramus; killed herself at his death.

**THYESTES:** Brother of Atreus; Atreus killed three of his sons and served them to him at banquet.

**TIRESIAS:** Blind soothsayer of Thebes.

**TISIPHONE:** *See* Furies.

**TITANS:** Early gods from which Olympian gods were derived; children of Uranus and Gaea.

**TITHONUS:** Mortal loved by Eos; changed into grasshopper.

**TRITON:** Demigod of sea; son of Poseidon.

**TURNUS:** King of Rutuli in Italy; betrothed to Lavinia; slain by Aeneas.

**ULYSSES:** *See* Odysseus.

**URANIA:** *See* Muses.

**URANUS:** Personification of Heaven; husband of Gaea; father of Titans; dethroned by his son Cronus.

**VENUS:** *See* Aphrodite.

**VERTUMNUS:** Roman god of fruits and vegetables; husband of Pomona.

**VESTA:** *See* Hestia.

**VULCAN:** *See* Hephaestus.

**WINDS:** Aeolus (keeper of winds), Bo-reas (Aquila) (north wind), Eurus (east wind), Notus (Auster) (south wind), Zephyrus (Favonius) (west wind).

**ZEPHYRUS:** *See* Winds.

**ZEUS (JUPITER):** Chief of Olympian gods; son of Cronus and Rhea; husband of Hera.

## Norse Mythology

**AESIR:** Chief gods of Asgard.

**ANDVARI:** Dwarf; robbed of gold and magic ring by Loki.

**ANGERBOTH (Angrbotha):** Giantess; mother by Loki of Fenrir, Hel, and Midgard serpent.

**ASGARD (Asgarth):** Abode of gods.

**ASK (Aske, Ask):** First man; created by Odin, Hoenir, and Lothar.

**ASYNJUR:** Goddesses of Asgard.

**ATLI:** Second husband of Gudrun; invited Gunnar and Hogni to his court, where they were slain; slain by Gudrun.

**AUDHUMLA (Audhumbla):** Cow that nourished Ymir; created Buri by licking ice cliff.

**BALDER (Baldr, Baldur):** God of light, spring, peace, joy; son of Odin; slain by Hoth at instigation of Loki.

**BIFROST:** Rainbow bridge connecting Midgard and Asgard.

**BRAGI (Brage):** God of poetry; husband of Ithunn.

**BRANSTOCK:** Great oak in hall of Vol-sung; into it, Odin thrust Gram, which only Sigmund could draw forth.

**BRYNHILD:** Valkyrie; wakened from magic sleep by Sigurd; married Gunnar;

instigated death of Sigurd; killed herself and was burned on pyre beside Sigurd.

**BUR (Bor):** Son of Buri; father of Odin, Hoenir, and Lothar.

**BURI (Bori):** Progenitor of gods; father of Bur; created by Audhumla.

**EMBLA:** First woman; created by Odin, Hoenir, and Lothar.

**FAFNIR:** Son of Rodmar, whom he slew for gold in Otter's skin; in form of dragon, guarded gold; slain by Sigurd.

**FENRIR:** Wolf; offspring of Loki; swallows Odin at Ragnarok and is slain by Vitharr.

**FORSETI:** Son of Balder.

**FREY (Freyr):** God of fertility and crops; son of Njorth; originally one of Vanir.

**FREYA (Freyja):** Goddess of love and beauty; sister of Frey; originally one of Vanir.

**FRIGG (Frigga):** Goddess of sky; wife of Odin.

**GARM:** Watchdog of Hel; slays, and is slain by, Tyr at Ragnarok.

**GIMLE:** Home of blessed after Ragnarok.

**GIUKI:** King of Nibelungs; father of Gunnar, Hogni, Guttorm, and Gudrun.

**GLATHSHEIM** (Gladshheim): Hall of gods in Asgard.

**GRAM** (meaning "Angry"): Sigmund's sword; rewedled by Regin; used by Sigurd to slay Fafnir.

**GREYFELL**: Sigmund's horse; descended from Sleipnir.

**GRIMHILD**: Mother of Gudrun; administered magic potion to Sigurd which made him forget Brynhild.

**GUDRUN**: Daughter of Giuki; wife of Sigurd; later wife of Atli and Jonakr.

**GUNNAR**: Son of Giuki; in his semblance Sigurd won Brynhild for him; slain at hall of Atli.

**GUTTORM**: Son of Giuki; slew Sigurd at Brynhild's request.

**HEIMDALL** (Heimdallr): Guardian of Asgard.

**HEL**: Goddess of dead and queen of underworld; daughter of Loki.

**HIORDIS**: Wife of Sigmund; mother of Sigurd.

**HOENIR**: One of creators of Ask and Embla; son of Bur.

**HOGNI**: Son of Giuki; slain at hall of Atli.

**HOTH** (Hoder, Hodur): Blind god of night and darkness; slayer of Balder at instigation of Loki.

**ITHUNN** (Ithun, Iduna): Keeper of golden apples of youth; wife of Bragi.

**JONAKR**: Third husband of Gudrun.

**JORMUNREK**: Slayer of Swanhild; slain by sons of Gudrun.

**JOTUNNHEIM** (Jotunheim): Abode of giants.

**LIF** and **LIFTHRASIR**: First man and woman after Ragnarok.

**LOKI**: God of evil and mischief; instigator of Balder's death.

**LOTHUR** (Lodur): One of creators of Ask and Embla.

**MIDGARD** (Midgarth): Abode of mankind; the earth.

**MIDGARD SERPENT**: Sea monster; offspring of Loki; slays, and is slain by, Thor at Ragnarok.

**MIMIR**: Giant; guardian of well in Jotunheim at root of Yggdrasil; knower of past and future.

**MJOLLNIR**: Magic hammer of Thor.

**NAGLFAR**: Ship to be used by giants in attacking Asgard at Ragnarok; built from nails of dead men.

**NANNA**: Wife of Balder.

**NIBELUNGS**: Dwellers in northern kingdom ruled by Giuki.

**NIFLHEIM** (Nifelheim): Outer region of cold and darkness; abode of Hel.

**NJORTH**: Father of Frey and Freya; originally one of Vanir.

**NORNS**: Demigoddesses of fate: Urth (Urdur) (Past), Verthandi (Verdandi) (Present), Skuld (Future).

**ODIN** (Othin): Head of Aesir; creator of world with Vili and Ve; equivalent to Woden (Wodan, Wotan) in Teutonic mythology.

**OTTER**: Son of Rodmar; slain by Loki; his skin filled with gold hoard of Andvari to appease Rodmar.

**RAGNAROK**: Final destruction of present world in battle between gods and giants; some minor gods will survive, and Lif and Lifthrasir will repeople world.

**REGIN**: Blacksmith; son of Rodmar; foster-father of Sigurd.

**RENER**: King of Huns; son of Sigi.

**RODMAR**: Father of Regin, Otter, and Fafnir; demanded Otter's skin be filled with gold; slain by Fafnir, who stole gold.

**SIF**: Wife of Thor.

**SIGGEIR**: King of Goths; husband of Signy; he and his sons slew Volsung and his sons, except Sigmund; slain by Sigmund and Sinfliotli.

**SIGI**: King of Huns; son of Odin.

**SIGMUND**: Son of Volsung; brother of Signy, who bore him Sinfliotli; husband of Hiordis, who bore him Sigurd.

**SIGNY**: Daughter of Volsung; sister of Sigmund; wife of Siggeir; mother by Sigmund of Sinfliotli.

**SIGURD**: Son of Sigmund and Hiordis; wakened Brynhild from magic sleep; married Gudrun; slain by Guttorm at instigation of Brynhild.

**SIGYN**: Wife of Loki.

**SINFIOTLI**: Son of Sigmund and Signy.

**SKULD**: See Norns.

**SLEIPNIR** (Sleipner): Eight-legged horse of Odin.

**SURT** (Surtr): Fire demon; slays Frey at Ragnarok.

**SVARTALFAHEIM**: Abode of dwarfs.

**SWANHILD**: Daughter of Sigurd and Gudrun; slain by Jormunrek.

**THOR**: God of thunder; oldest son of Odin; equivalent to Germanic deity Donar.

**TYR**: God of war; son of Odin; equivalent to Tiu in Teutonic mythology.

**ULL** (Ullr): Son of Sif; stepson of Thor.

**URTH**: See Norns.

**VALHALLA** (Valhall): Great hall in Asgard where Odin received souls of heroes killed in battle.

**VALI**: Odin's son; Ragnarok survivor.

**VALKYRIES**: Virgins, messengers of Odin, who selected heroes to die in battle and took them to Valhalla; generally considered as nine in number.

**VANIR**: Early race of gods; three survivors, Njorth, Frey, and Freya, are associated with Aesir.



VE: Brother of Odin; one of creators of world.

VERTHANDI: See Norns.

VILI: Brother of Odin; one of creators of world.

VINGOLF: Abode of goddesses in Asgard.

VITHARR (Vithar): Son of Odin; survivor of Ragnarok.

VOLSUNG: King of Huns; son of Rerir;

father of Signy, Sigmund, etc.; his descendants were called Volsungs.

YGGDRASIL: Giant ash tree springing from body of Ymir and supporting universe; its roots extended to Asgard, Jotunnheim, and Nifheim.

YMIR (Ymer): Primeval frost giant killed by Odin, Vili, and Ve; world created from his body; also, from his body sprang Yggdrasil.

## Egyptian Mythology

AARU: Abode of the blessed dead.

AMEN (Amon, Ammon): One of chief Theban deities; united with sun god under form of Amen-Ra.

AMENTI: Region of dead where souls were judged by Osiris.

ANUBIS: Guide of souls to Amenti; son of Osiris; jackal-headed.

APIS: Sacred bull, an embodiment of Pthah; identified with Osiris as Osiris-Apis or Serapis.

GEB (Keb, Seb): Earth god; father of Osiris; represented with goose on head.

HATHOR (Athor): Goddess of love and mirth; cow-headed.

HORUS: God of day; son of Osiris and Isis; hawk-headed.

ISIS: Goddess of motherhood and fertility; sister and wife of Osiris.

KHEPERA: God of morning sun.

KHNEMU (Khnum, Chnuphis, Chnemu, Chnum): Ram-headed god.

KHONSU (Khensu, Khuns): Son of Amen and Mut.

MENTU (Ment): Solar deity, sometimes considered god of war; falcon-headed.

MIN (Khem, Chem): Principle of physical life.

MUT (Maut): Wife of Amen.

NEPHTHYS: Goddess of the dead; sister and wife of Set.

NU: Chaos from which world was created, personified as a god.

NUT: Goddess of heavens; consort of Geb.

OSIRIS: God of underworld and judge of dead; son of Geb and Nut.

PTAH (Phtha): Chief deity of Memphis.

RA: God of the Sun, the supreme god; son of Nut; Pharaohs claimed descent from him; represented as lion, cat, or falcon.

SERAPIS: God uniting attributes of Osiris and Apis.

SET (Seth): God of darkness or evil; brother and enemy of Osiris.

SHU: Solar deity; son of Ra and Hathor.

TEM (Atmu, Atum, Tum): Solar deity.

THOTH (Dhouti): God of wisdom and magic; scribe of gods; ibis-headed.

## Rulers of England

### Saxons<sup>1</sup>

Name	Born	Ruled <sup>2</sup>
Egbert <sup>3</sup> .....	c. 775	828-839
Ethelwulf .....	?	839-858
Ethelbald .....	?	858-860
Ethelbert .....	?	860-866
Ethelred I .....	?	866-871
Alfred the Great .....	849	871-899
Edward the Elder .....	c. 870	899-925
Athelstan .....	895	925-939
Edmund I the Deed-doer ..	921	939-946
Edred .....	c. 925	946-955
Edwy the Fair .....	c. 943	955-959
Edward the Peaceful .....	943	959-975
Edward the Martyr .....	c. 962	975-979
Ethelred II the Unready ..	868	979-1016
Edmund II Ironside .....	c. 993	1016-1016

### Danes

Canute .....	995	1016-1035
Harold I Harefoot .....	c. 1016	1035-1040
Hardecnute .....	c. 1018	1040-1042

### Saxons

Edward the Confessor .....	c. 1004	1042-1066
Harold II .....	c. 1020	1066-1066

### House of Normandy

Name	Born	Ruled <sup>2</sup>
William I the Conqueror ..	1027	1066-1087
William II Rufus .....	c. 1056	1087-1100
Henry I Beauclore .....	1068	1100-1135
Stephen of Blois .....	c. 1100	1135-1154

### House of Plantagenet

Henry II .....	1133	1154-1189
Richard I Coeur de Lion ..	1157	1189-1199
John Lackland .....	1167	1199-1216
Henry III .....	1207	1216-1272
Edward I Longshanks .....	1239	1272-1307
Edward II .....	1284	1307-1327
Edward III .....	1312	1327-1377
Richard II .....	1367	1377-1399 <sup>4</sup>

### House of Lancaster

Henry IV Bolingbroke .....	1366	1399-1413
Henry V .....	1387	1413-1422
Henry VI .....	1421	1422-1461 <sup>13</sup>

### House of York

Edward IV .....	1442	1461-1483 <sup>13</sup>
Edward V .....	1470	1483-1483
Richard III .....	1452	1483-1485

## House of Tudor

Name	Born	Ruled <sup>2</sup>
Henry VII .....	1457	1485-1509
Henry VIII .....	1491	1509-1547
Edward VI .....	1537	1547-1553
Jane (Lady Jane Grey) <sup>5</sup> ..	1537	1553-1553
Mary I ("Bloody Mary") ..	1516	1553-1558
Elizabeth I .....	1533	1558-1603

## House of Stuart

James I <sup>3</sup> .....	1566	1603-1625
Charles I .....	1600	1625-1649

## Commonwealth

Council of State .....	....	1649-1653
Oliver Cromwell <sup>7</sup> .....	1599	1653-1658
Richard Cromwell <sup>7</sup> .....	1626	1658-1659 <sup>8</sup>

## Restoration of House of Stuart

Charles II .....	1630	1660-1685
James II .....	1633	1685-1688 <sup>9</sup>

<sup>1</sup> Dates for Saxon Kings are still subjects of controversy. <sup>2</sup> Year of end of rule is also that of death, unless otherwise indicated. <sup>3</sup> Became King of West Saxons in 802; considered (from 828) first King of all England. <sup>4</sup> Died 1400. <sup>5</sup> Nominal Queen for 9 days; not counted as Queen by some authorities. She was beheaded in 1554.

## Restoration of House of Stuart (cont'd)

Name	Born	Ruled <sup>2</sup>
William III <sup>10</sup> .....	1650	1689-1702
Mary II <sup>10</sup> .....	1662	1689-1694
Anne .....	1665	1702-1714

## House of Hanover

George I .....	1660	1714-1727
George II .....	1683	1727-1760
George III .....	1738	1760-1820
George IV .....	1762	1820-1830
William IV .....	1765	1830-1837
Victoria .....	1819	1837-1901

House of Saxe-Coburg<sup>11</sup>

Edward VII .....	1841	1901-1910
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House of Windsor<sup>11</sup>

George V .....	1865	1910-1936
Edward VIII .....	1894	1936-1936 <sup>12</sup>
George VI .....	1895	1936-1952
Elizabeth II .....	1926	1952-

<sup>6</sup> Ruled in Scotland as James VI (1567-1625). <sup>7</sup> Lord Protector. <sup>8</sup> Died 1712. <sup>9</sup> Died 1701. <sup>10</sup> Joint rulers 1689-1694. <sup>11</sup> Names changed from Saxe-Coburg to Windsor in 1917. <sup>12</sup> Has been known since his abdication as the Duke of Windsor. <sup>13</sup> Henry VI reigned again briefly 1470-71.

## British Prime Ministers Since 1770

Name	Term
Lord North (Tory) .....	1770-1782
Marquis of Rockingham (Whig) .....	1782-1782
Earl of Shelburne (Whig) .....	1782-1783
Duke of Portland (Coalition) ..	1783-1783
William Pitt, the Younger (Tory) .....	1783-1801
Henry Addington (Tory) .....	1801-1804
William Pitt, the Younger (Tory) .....	1804-1806
Baron Grenville (Whig) .....	1806-1807
Duke of Portland (Tory) .....	1807-1809
Spencer Perceval (Tory) .....	1809-1812
Earl of Liverpool (Tory) .....	1812-1827
George Canning (Tory) .....	1827-1827
Viscount Goderich (Tory) ....	1827-1828
Duke of Wellington (Tory) ....	1828-1830
Earl Grey (Whig) .....	1830-1834
Viscount Melbourne (Whig) ...	1834-1834
Sir Robert Peel (Tory) .....	1834-1835
Viscount Melbourne (Whig) ...	1835-1841
Sir Robert Peel (Tory) .....	1841-1846
Earl Russell (Whig) .....	1846-1852
Earl of Derby (Tory) .....	1852-1852
Earl of Aberdeen (Coalition) ..	1852-1855
Viscount Palmerston (Liberal) .	1855-1858
Earl of Derby (Conserv.) .....	1858-1859
Viscount Palmerston (Liberal) .	1859-1865
Earl Russell (Liberal) .....	1865-1866
Earl of Derby (Conserv.) .....	1866-1868
Benjamin Disraeli (Conserv.) ..	1868-1868

Name	Term
William E. Gladstone (Liberal) .	1868-1874
Benjamin Disraeli (Conserv.) ..	1874-1880
William E. Gladstone (Liberal) .	1880-1885
Marquis of Salisbury (Conserv.)	1885-1886
William E. Gladstone (Liberal) .	1886-1886
Marquis of Salisbury (Conserv.)	1886-1892
William E. Gladstone (Liberal) .	1892-1894
Earl of Rosebery (Liberal) ....	1894-1895
Marquis of Salisbury (Conserv.)	1895-1902
Earl Balfour (Conserv.) .....	1902-1905
Sir H. Campbell-Bannerman (Liberal) .....	1905-1908
Herbert H. Asquith (Liberal) ..	1908-1915
Herbert H. Asquith (Coalition) .	1915-1916
David Lloyd George (Coalition)	1916-1922
Andrew Bonar Law (Conserv.) .	1922-1923
Stanley Baldwin (Conserv.) ...	1923-1924
James Ramsay MacDonald (Labour) .....	1924-1924
Stanley Baldwin (Conserv.) ...	1924-1929
James Ramsay MacDonald (Labour) .....	1929-1931
James Ramsay MacDonald (Coalition) .....	1931-1935
Stanley Baldwin (Coalition) ..	1935-1937
Neville Chamberlain (Coalition)	1937-1940
Winston Churchill (Coalition) .	1940-1945
Clement R. Attlee (Labour) ..	1945-1951
Sir Winston Churchill (Conserv.) .....	1951-

## Rulers of France

## Carolingian Dynasty

Name	Born	Ruled <sup>1</sup>
Pepin the Short	c. 714	751- 768
Charlemagne <sup>2</sup>	742	768- 814
Louis I the Debonair <sup>3</sup>	778	814- 840
Charles I the Bald <sup>4</sup>	823	840- 877
Louis II the Stammerer	846	877- 879
Louis III <sup>5</sup>	c. 863	879- 882
Carloman <sup>6</sup>	?	879- 884
Charles II the Fat <sup>6</sup>	839	884- 887 <sup>7</sup>
Eudes (Odo), Count of Paris	?	888- 898
Charles III the Simple <sup>8</sup>	879	893- 923 <sup>9</sup>
Robert I <sup>10</sup>	c. 865	922- 923
Rudolf (Raoul), Duke of Burgundy	?	926- 936
Louis IV d'Outremer	c. 921	936- 954
Lothair	941	954- 986
Louis V the Sluggard	c. 966	986- 987

## Capetian Dynasty

Hugh Capet	c. 940	987- 996
Robert II the Pious <sup>11</sup>	c. 970	996-1031
Henry I	1008	1031-1060
Philip I	1052	1060-1108
Louis VI the Fat	1081	1108-1137
Louis VII the Young	c.1121	1137-1180
Philip II (Philip Augustus)	1165	1180-1223
Louis VIII the Lion	1187	1223-1226
Louis IX (St. Louis)	1214	1226-1270
Philip III the Bold	1245	1270-1285
Philip IV the Fair	1268	1285-1314
Louis X the Quarreler	1289	1314-1316
John I	1316	1316-1316
Philip V the Tall	1294	1316-1322
Charles IV the Fair	1294	1322-1328

## House of Valois

Philip VI	1293	1328-1350
John II the Good	1319	1350-1364
Charles V the Wise	1337	1364-1380
Charles VI the Well-Beloved	1368	1380-1422
Charles VII	1403	1422-1461
Louis XI	1423	1461-1483
Charles VIII	1470	1483-1498
Louis XII the Father of the People	1462	1498-1515
Francis I	1494	1515-1547
Henry II	1519	1547-1559
Francis II	1544	1559-1560
Charles IX	1550	1560-1574
Henry III	1551	1574-1589

## House of Bourbon

Henry IV of Navarre	1553	1589-1610
Louis XIII	1601	1610-1643
Louis XIV the Great	1638	1643-1715
Louis XV the Well-Beloved	1710	1715-1774

## House of Bourbon (cont'd)

Name	Born	Ruled <sup>1</sup>
Louis XVI	1754	1774-1792 <sup>12</sup>
Louis XVII (Louis Charles de France) <sup>13</sup>	1785	1793-1795

## First Republic

National Convention	....	1792-1795
Directory (Directoire)	....	1795-1799

## Consulate

Napoleon Bonaparte <sup>14</sup>	1769	1799-1804
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## First Empire

Napoleon I	1769	1804-1815 <sup>15</sup>
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## Restoration of House of Bourbon

Louis XVIII le Désiré	1755	1814-1824
Charles X	1757	1824-1830 <sup>16</sup>

## Bourbon-Orleans line

Louis Philippe ("Citizen King")	1773	1830-1848 <sup>17</sup>
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## Second Republic

Louis Napoleon <sup>18</sup>	1808	1848-1852
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## Second Empire

Napoleon III (Louis Napoleon)	1808	1852-1871 <sup>19</sup>
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## Third Republic

Louis Adolphe Thiers <sup>20</sup>	1797	1871-1873 <sup>21</sup>
Marie E. P. M. de MacMahon <sup>20</sup>	1808	1873-1879 <sup>22</sup>
François P. J. Grévy <sup>20</sup>	1807	1879-1887 <sup>23</sup>
Sadi Carnot <sup>20</sup>	1837	1887-1894
Jean Casimir-Périer <sup>20</sup>	1847	1894-1895 <sup>24</sup>
François Félix Faure <sup>20</sup>	1841	1895-1899
Émile Loubet <sup>20</sup>	1838	1899-1906 <sup>25</sup>
Clement Armand Fallières <sup>20</sup>	1841	1906-1913 <sup>26</sup>
Raymond Poincaré <sup>20</sup>	1860	1913-1920 <sup>27</sup>
Paul E. L. Deschanel <sup>20</sup>	1856	1920-1920 <sup>28</sup>
Alexandre Millerand <sup>20</sup>	1859	1920-1924 <sup>29</sup>
Gaston Doumergue <sup>20</sup>	1863	1924-1931 <sup>30</sup>
Paul Doumer <sup>20</sup>	1857	1931-1932
Albert Lebrun <sup>20</sup>	1871	1932-1940 <sup>31</sup>

## Vichy Government

Henri Philippe Pétain <sup>32</sup>	1856	1940-1944 <sup>33</sup>
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## Provisional Government

Charles de Gaulle <sup>34</sup>	1890	1944-1946 <sup>35</sup>
Félix Gouin <sup>34</sup>	1884	1946-1946 <sup>35</sup>
Georges Bidault <sup>34</sup>	1899	1946-1947 <sup>35</sup>

## Fourth Republic

Vincent Auriol <sup>36</sup>	1884	1947-1954 <sup>36</sup>
René Coty <sup>36</sup>	1882	1954-

<sup>1</sup> Year of end of rule is also that of death, unless otherwise indicated. <sup>2</sup> Crowned Emperor of the West in 800. <sup>3</sup> Holy Roman Emperor 814-840. <sup>4</sup> Holy Roman Emperor 875-877 as Charles II. <sup>5</sup> Ruled jointly 879-882. <sup>6</sup> Holy Roman Emperor 881-887 as Charles III. <sup>7</sup> Died 888. <sup>8</sup> King 893-898 in opposition to Eudes. <sup>9</sup> Died 929. <sup>10</sup> Not counted in regular line of Kings of France by some authorities. Elected by nobles but killed in Battle of Soissons. <sup>11</sup> Sometimes called Robert I. <sup>12</sup> Executed 1793. <sup>13</sup> Titular King only. He died in prison according to official reports, but many pretenders appeared during the Bourbon restoration. <sup>14</sup> As First Consul, Napoleon

held the power of government. In 1804, he became Emperor. <sup>15</sup> Abdicated first time June 1814. Re-entered Paris Mar. 1815, after escape from Elba; Louis XVIII fled to Ghent. Abdicated second time June 1815. He named as his successor his son, Napoleon II, who was not acceptable to the Allies. He died 1821. <sup>16</sup> Died 1836. <sup>17</sup> Died 1850. <sup>18</sup> President; became Emperor in 1852. <sup>19</sup> Died 1873. <sup>20</sup> President. <sup>21</sup> Died 1877. <sup>22</sup> Died 1893. <sup>23</sup> Died 1891. <sup>24</sup> Died 1907. <sup>25</sup> Died 1929. <sup>26</sup> Died 1931. <sup>27</sup> Died 1934. <sup>28</sup> Died 1922. <sup>29</sup> Died 1942. <sup>30</sup> Died 1937. <sup>31</sup> Died 1950. <sup>32</sup> Chief of State. <sup>33</sup> Died 1951. <sup>34</sup> Interim President. <sup>35</sup> Still alive.



## Rulers of Germany and Prussia

### Kings of Prussia

Name	Born	Ruled <sup>1</sup>
Frederick I <sup>2</sup> .....	1657	1701-1713
Frederick William I .....	1688	1713-1740
Frederick II the Great ....	1712	1740-1786
Frederick William II .....	1744	1786-1797
Frederick William III .....	1770	1797-1840
Frederick William IV .....	1795	1840-1861
William I .....	1797	1861-1871 <sup>3</sup>

### Emperors of Germany

William I .....	1797	1871-1888
Frederick III .....	1831	1888-1888
William II .....	1859	1888-1918 <sup>4</sup>

<sup>1</sup> Year of end of rule is also that of death, unless otherwise indicated. <sup>2</sup> Was Elector of Brandenburg (1688-1701) as Frederick III. <sup>3</sup> Became Emperor of Germany

### Heads of the Reich

Name	Born	Ruled <sup>1</sup>
Friedrich Ebert <sup>5</sup> .....	1871	1919-1925
Paul von Hindenburg <sup>6</sup> ....	1847	1925-1934
Adolf Hitler <sup>6,7</sup> .....	1889	1934-1945
Karl Doenitz <sup>6</sup> .....	1891	1945-1945 <sup>8</sup>

### Federal Republic of Germany (Western)

Theodor Heuss <sup>5</sup> .....	1884	1949-
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### Democratic Republic Government (Eastern)

Wilhelm Pieck <sup>5</sup> .....	1876	1949-
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in 1871. <sup>4</sup> Died 1941. <sup>5</sup> President. <sup>6</sup> Führer. <sup>7</sup> Named Chancellor by President Hindenburg in 1933. <sup>8</sup> Still alive.

## Rulers of Russia Since 1533

Name	Born	Ruled <sup>1</sup>
Ivan IV the Terrible .....	1530	1533-1584
Theodore I .....	1557	1584-1598
Boris Godunov .....	c.1551	1598-1605
Theodore II .....	1589	1605-1605
Demetrius I <sup>2</sup> .....	?	1605-1606
Basil IV Shuiski .....	?	1606-1610 <sup>3</sup>
"Time of Troubles" .....	.....	1610-1613
Michael Romanov .....	1596	1613-1645
Alexis I .....	1629	1645-1676
Theodore III .....	1656	1676-1682
Ivan V <sup>4</sup> .....	1666	1682 1689 <sup>5</sup>
Peter I the Great <sup>4</sup> .....	1672	1682 1725
Catherine I .....	c.1684	1725-1727
Peter II .....	1715	1727-1730
Anna .....	1693	1730-1740
Ivan VI .....	1740	1740 1741 <sup>6</sup>
Elizabeth .....	1709	1741-1762

Name	Born	Ruled <sup>1</sup>
Peter III .....	1728	1762-1762
Catherine II the Great ....	1729	1762-1796
Paul I .....	1754	1796-1801
Alexander I .....	1777	1801-1825
Nicholas I .....	1796	1825-1855
Alexander II .....	1818	1855-1881
Alexander III .....	1845	1881-1894
Nicholas II .....	1868	1894-1917 <sup>7</sup>

### Provisional Government

Prince Georgi Lvov <sup>8</sup> .....	1861	1917-1917 <sup>9</sup>
Alexander Kerensky <sup>8</sup> .....	1881	1917-1917 <sup>10</sup>

### U.S.S.R.

Nikolai Lenin <sup>8</sup> .....	1870	1917-1924
Joseph Stalin <sup>11</sup> .....	1879	1924-1953
Georgi M. Malenkov <sup>8</sup> .....	1902	1953-

deposed. <sup>8</sup> Died 1696. <sup>9</sup> Died 1764. <sup>7</sup> Killed 1918. <sup>8</sup> Premier. <sup>9</sup> Died 1925. <sup>10</sup> Still alive. <sup>11</sup> General Secretary of Communist party; Premier 1941-53.

## Animal Names: Male, Female and Young

Source: Grace Davall, N.Y. Zoological Society.

Animal	Male	Female	Young	Animal	Male	Female	Young
Ass	Jack	Jenny	Colt	Horse	Stallion	Mare	Foal
Bear	He-bear	She-bear	Cub	Lion	Lion	Lioness	Cub
Cat	Tom	Tabby	Kitten	Rabbit	Buck	Doe	
Cattle	Bull	Cow	Calf	Sheep	Ram	Ewe	Lamb
Chicken	Rooster	Hen	Chick	Swan	Cob	Pen	Cygnét
Deer	Buck	Doe	Fawn	Swine	Boar	Sow	Shoat or piglet
Dog	Dog	Bitch	Pup				
Duck	Drake	Duck	Duckling	Tiger	Tiger	Tigress	Cub
Elephant	Bull	Cow	Calf	Whale	Bull	Cow	Calf
Fox	Dog	Vixen	Cub	Wolf	Dog	Bitch	Cub, pup or whelp
Goose	Gander	Goose	Gosling				

## Mason and Dixon's Line

Mason and Dixon's Line (often called the Mason-Dixon Line) is the boundary between Pennsylvania and Maryland, running at a north latitude of 39°43'19.11". The greater part of it was surveyed from 1763-67 by Charles Mason and Jeremiah

Dixon, English astronomers who had been appointed to settle a dispute between the colonies. As the line was partly the boundary between the free and the slave states, it has come to signify the division between the North and the South.

## Opera and Operetta Composers

(The operas listed with each composer are not necessarily the only ones which he composed. Rather, they are those which remain best-known today—either because of occasional or frequent performances, or because of the popularity of overtures, arias, etc. The year and location after each opera are those of the first official performance.)

**Auber, Daniel François (1782-1871):** *Fra Diavolo* (1830, Paris).

**Baïfe, Michael (1808-1870):** *The Bohemian Girl* (1843, London).

**Beethoven, Ludwig van (1770-1827):** *Fidelio* (1805, Vienna).

**Bellini, Vincenzo (1801-1835):** *La Sornambula* (1831, Milan); *Norma* (1831, Milan); *I Puritani* (1835, Paris).

**Berg, Alban (1885-1935):** *Lulu* (1924, Berlin); *Wozzeck* (1937, Zürich).

**Berlioz, Hector (1803-1869):** *Benvenuto Cellini* (1838, Paris); *The Damnation of Faust* (1846, Paris); *Beatrice and Benedict* (1862, Baden-Baden); *Les Troyens* (\*).

**Bizet, Georges (1838-1875):** *The Pearl Fishers* (1863, Paris); *Carmen* (1875, Paris).

**Blitzstein, Marc (1905- ):** *The Cradle Will Rock* (1937, New York); *Regina* (1949, New York).

**Boito, Arrigo (1842-1918):** *Mefistofele* (1868, Milan).

**Borodin, Alexander (1834-1887):** *Prince Igor* (1890, Petrograd).

**Britten, Benjamin (1913- ):** *Paul Bunyan* (1941, New York); *Peter Grimes* (1945, London); *The Rape of Lucrece* (1946, Glyndebourne, Eng.).

**Charpentier, Gustave (1860- ):** *Louise* (1900, Paris).

**Coward, Noel (1899- ):** *Bitter Sweet* (1929, London).

**Damrosch, Walter (1862-1950):** *The Scarlet Letter* (1896, Boston); *The Man Without a Country* (1937, New York).

**Debussy, Claude (1862-1918):** *Pelléas et Mélisande* (1902, Paris).

**De Koven, Reginald (1859-1920):** *Robin Hood* (1890, Chicago).

**Delibes, Léo (1836-1891):** *Lakmé* (1883, Paris).

**Donizetti, Gaetano (1797-1848):** *L'Elisir d'Amore* (1832, Milan); *Lucia di Lammermoor* (1835, Naples); *The Daughter of the Regiment* (1840, Paris); *Don Pasquale* (1843, Paris).

**Falla, Manuel de (1876-1946):** *La Vida Breve* (1913, Nice).

**Flotow, Friedrich von (1812-1883):** *Martha* (1847, Vienna).

**Friml, Rudolf (1884- ):** *The Firefly* (1912, Syracuse, N. Y.); *Katinka* (1915, New York); *Rose Marie* (1924, New York); *The Vagabond King* (1925, New York).

**Gershwin, George (1898-1937):** *Porgy and Bess* (1935, New York).

**Giordano, Umberto (1867-1948):** *Andrea Chénier* (1896, Milan); *Madame Sans-Gêne* (1915, New York).

**Glinka, Mikhail (1803-1857):** *A Life for the Tsar* (1836, Petrograd); *Russian and Ludmilla* (1842, Petrograd).

**Gluck, Christoph Willibald (1714-1787):** *Orfeo ed Euridice* (1762, Vienna); *Alceste* (1767, Vienna); *Iphigenia in Aulis* (1777, Paris); *Iphigenia in Tauris* (1779, Paris).

**Goldmark, Karl (1830-1915):** *The Queen of Sheba* (1875, Vienna).

**Gounod, Charles François (1818-1893):** *Faust* (1859, Paris); *Romeo and Juliet* (1867, Paris).

**Halévy, Jacques François (1799-1862):** *La Juive* (1835, Paris).

**Herbert, Victor (1859-1924):** *The Fortune Teller* (1898, New York); *Babes in Toyland* (1903, Chicago); *Mlle. Modiste* (1905, New York); *The Red Mill* (1906, New York); *Naughty Marietta* (1910, New York); *Natoma* (1911, Philadelphia); *Sweethearts* (1913, Baltimore); *The Princess Pat* (1915, New York); *Eileen* (1917, New York).

**Herold, Louis J. F. (1791-1833):** *Zampa* (1831, Paris).

**Humperdinck, Engelbert (1854-1921):** *Hansel and Gretel* (1893, Weimar).

**Kodály, Zoltán (1882- ):** *Háry János* (1926, Budapest).

**Křenek, Ernst (1900- ):** *Jonny Spielt Auf* (1927, Leipzig).

**Lehár, Franz (1870-1948):** *The Merry Widow* (1907, London); *The Count of Luxembourg* (1909, Vienna); *Gypsy Love* (1911, New York).

**Leoncavallo, Ruggero (1858-1919):** *I Pagliacci* (1892, Milan).

**Mascagni, Pietro (1863-1945):** *Cavalleria Rusticana* (1890, Rome); *L'Amico Fritz* (1891, Rome).

**Massenet, Jules (1842-1912):** *Hérodiade* (1881, Brussels); *Manon* (1884, Paris); *Thaïs* (1894, Paris).

**Menotti, Gian-Carlo (1911- ):** *Amelia Goes to the Ball* (1937, Philadelphia); *The Medium* (1946, New York); *The Telephone* (1947, New York); *The Consul* (1950, New York); *Amahl and the Night Visitors* (1951, New York\*).

**Meyerbeer, Giacomo (1791-1864):** *Les Huguenots* (1836, Paris); *Le Prophète* (1849, Paris); *L'Africana* (1865, Paris).

\* Originally written as one opera but divided by Berlioz into two parts: *La Prise de Troie* and *Les Troyens à Carthage*. The second part was first performed in 1863 in Paris. The work as a whole was first performed in 1890 in Karlsruhe.

\* First opera ever composed for television; presented over NBC TV network. First stage presentation: 1952, New York.

Montemezzi, Italo (1875-1952): *L'Amore del Tre Re* (1913, Milan).

Mozart, Wolfgang Amadeus (1756-1791): *Idomeneo* (1781, Munich); *The Abduction from the Seraglio* (1782, Vienna); *The Marriage of Figaro* (1786, Vienna); *Don Giovanni* (1787, Prague); *Così fan Tutte* (1790, Vienna); *The Magic Flute* (1791, Vienna).

Musorgski, Modest (1835-1881): *Boris Godunov* (1874, Petrograd); *Khovanshchina* (1886, Petrograd).

Nicolai, Otto (1810-1849): *The Merry Wives of Windsor* (1849, Berlin).

Offenbach, Jacques (1819-1880): *Orpheus in Hades* (1858, Paris); *The Tales of Hoffmann* (1881, Paris).

Pepusch, John Christopher (1667-1752): *The Beggar's Opera* (1728, London).

Pergolesi, Giovanni Battista (1710-1736): *La Serva Padrona* (1733, Naples).

Planquette, Robert (1848-1903): *The Chimes of Normandy* (1877, Paris).

Ponchielli, Amilcare (1834-1886): *La Gioconda* (1876, Milan).

Prokofieff, Serge (1891-1953): *The Love for Three Oranges* (1921, Chicago).

Puccini, Giacomo (1858-1924): *Manon Lescaut* (1893, Turin); *La Bohème* (1896, Turin); *Tosca* (1900, Rome); *Madame Butterfly* (1904, Milan); *Girl of the Golden West* (1910, New York); *Turandot* (1926, Milan).

Purcell, Henry (1659-1695): *Dido and Aeneas* (1689, Chelsea, Eng.).

Ravel, Maurice (1875-1937): *L'Heure Espagnole* (1911, Paris); *L'Enfant et les Sortilèges* (1925, Monte Carlo).

Rimski-Korsakov, Nikolai (1844-1908): *The Snow Maiden* (1882, Petrograd); *Sadko* (1897, Moscow); *Le Coq d'Or* (1909, Moscow).

Romberg, Sigmund (1887-1951): *Maytime* (1917, New York); *Blossom Time* (1921, New York); *The Student Prince* (1924, New York); *The Desert Song* (1926, New York); *The New Moon* (1928, New York); *Up in Central Park* (1945, New York).

Rossini, Gioacchino (1792-1868): *The Barber of Seville* (1816, Rome); *Semiramide* (1823, Venice); *William Tell* (1829, Paris).

Saint-Saëns, Camille (1835-1920): *Samson et Dalila* (1877, Weimar).

Smetana, Bedřich (1824-1884): *The Bartered Bride* (1866, Prague).

Sousa, John Philip (1854-1932): *El Capitán* (1896, New York).

Straus, Oskar (1870-1954): *The Chocolate Soldier* (1908, Vienna).

Strauss, Johann (1825-1899): *Die Fledermaus* (1874, Vienna); *The Gypsy Baron* (1885, Vienna).

Strauss, Richard (1864-1949): *Salome* (1905, Dresden); *Elektra* (1909, Dresden); *Der Rosenkavalier* (1911, Dresden); *Ariadne auf Naxos* (1912, Zürich).

Stravinsky, Igor (1882- ): *The Nightingale* (1914, Paris); *The Rake's Progress* (1951, Venice).

Sullivan, Sir Arthur (1842-1900): *Trial by Jury* (1875, London); *The Sorcerer* (1877, London); *H.M.S. Pinafore* (1878, London); *The Pirates of Penzance* (1879, New York); *Patience* (1881, London); *Iolanthe* (1882, London); *Princess Ida* (1884, London); *The Mikado* (1885, London); *Ruddigore* (1887, London); *The Yeoman of the Guard* (1888, London); *The Gondoliers* (1889, London).

Suppé, Franz von\* (1819-1895): *The Beautiful Galatea* (1865, Vienna); *Light Cavalry* (1866, Vienna).

Taylor, Deems (1885- ): *The King's Henchman* (1927, New York); *Peter Ibbetson* (1931, New York).

Tchaikovsky, Peter Illich (1840-1893): *Eugene Onegin* (1879, Moscow); *Joan of Arc* (1881, Petrograd); *Pique Dame* (1890, Petrograd).

Thomas, Ambroise (1811-1896): *Mignon* (1866, Paris); *Hamlet* (1868, Paris).

Thomson, Virgil (1896- ): *Four Saints in Three Acts* (1934, Hartford, Conn.).

Verdi, Giuseppe (1813-1901): *Ernani* (1844, Venice); *Rigoletto* (1851, Venice); *Il Trovatore* (1853, Rome); *La Traviata* (1853, Venice); *Simon Boccanegra* (1857, Venice); *A Masked Ball* (1859, Rome); *La Forza del Destino* (1862, Petrograd); *Don Carlos* (1867, Paris); *Aida* (1871, Cairo); *Otello* (1887, Milan); *Falstaff* (1893, Milan).

Wagner, Richard (1813-1883): *Rienzi* (1842, Dresden); *The Flying Dutchman* (1843, Dresden); *Tannhäuser* (1845, Dresden); *Lohengrin* (1850, Weimar); *Tristan and Isolde* (1865, Munich); *Die Meistersinger* (1868, Munich); *Das Rheingold* (1869, Munich); *Die Walküre* (1870, Munich); *Siegfried* (1876, Bayreuth); *Götterdämmerung* (1876, Bayreuth); *Parsifal* (1882, Bayreuth).

Weber, Karl Maria von (1786-1826): *Der Freischütz* (1821, Berlin); *Euryanthe* (1823, Vienna); *Oberon* (1826, London).

Weill, Kurt (1900-1950): *Die Dreigroschenoper* (Threepenny Opera) (1928, Berlin); *Street Scene* (1947, New York); *Down in the Valley* (1948, Bloomington, Ind.); *Lost in the Stars* (1949, New York).

Wolf-Ferrari, Ermanno (1876-1948): *The Secret of Suzanne* (1909, Munich); *The Jewels of the Madonna* (1911, Berlin).

\*Suppé's popular *Poet and Peasant* overture was written for a play rather than for an operetta.



## PARLIAMENTARY PROCEDURE

by

Dan Golenpaul

Parliamentary procedures are rules for the conduct of a meeting in an orderly and democratic manner. Their purpose is to ensure the rule by a majority and to protect the rights of all members of an organization or assembly in meetings and in connection with all activities of the organization. The application of parliamentary rules is solely for this purpose.

Very often, though, individuals employ the rules for a contest of wits. This practice can be interesting and the life of the meeting, but it can also be a nuisance and a field day for parliamentary pests. The degree to which this activity may be tolerated should be dictated by circumstances. A certain amount of indulgence may be necessary because it is part of the game and is inevitably an expression of many egos that meet in a group.

Under no circumstances, however, should a chairman or members permit anyone to use the rules of procedure to trick and confuse members or to impede the function of a meeting. To prevent these occurrences, a knowledge of parliamentary rules is important. We will do our best in the limited space permitted to impart a little learning. (But remember, a little learning is a dangerous thing.) What we are setting forth here should be adequate to take care of most situations in organizations made up of friendly people who want to conduct their business in an orderly, friendly manner.

If it is necessary for you to be a member of a group that is involved in bitter conflicts, then we advise that you go to more technical and authoritative works on parliamentary procedure such as *Robert's Rules of Order*, *Cushing's Manual*, *Sturgis' Standard Code of Parliamentary Procedure* and others. We also suggest that you go to the meetings with a good lawyer and a baseball bat.

## HOW TO FORM AN ORGANIZATION

People form or join organizations because they have a common interest or purpose that can best be advanced and attained through group activity. Whether the character of the organization be social, political, educational, communal, fraternal or athletic, its purpose and government are usually expressed in by-laws. They are not required to be elaborate, technical or legal.

### BY-LAWS

By-laws should simply state the objects of the organization, the rights and duties of members, the qualifications of members, the number required to constitute a quorum, the dues, the necessary governing officers and how they should be elected, their terms of office, when meetings should be held and where, the order of business and, in the case of large and impersonal organizations, an authority for settling parliamentary disputes. (An organization usually adopts as its guide such works as mentioned heretofore.)

### FIRST MEETING

At the first meeting of a group, temporary officers are chosen: a chairman, a secretary and a committee to prepare a draft of by-laws. The meeting is called to order by the member of the group who has assumed the leadership in the formation of the organization. He or she opens the meeting by the simple statement: "I now call the meeting to order," and asks the members to make nominations for chairman. When this announcement is made, members may ask for the floor by raising their hands, and, when recognized, offer a name in nomination. The person presiding can be nominated as can any other member present. Nominations require no seconding. A majority vote is necessary for the election of the chairman. The same procedure is required for the secretary and committee on by-laws.

The officers selected at the first meeting may serve until the next meeting or for a limited period, to be decided by a majority vote of the members present.

## SECOND MEETING

At the second meeting, the report of the committee on by-laws is presented to the membership. The entire report may be accepted by a motion to adopt the report. A two-thirds vote is required. If the entire report is not acceptable to the membership, each provision may be considered separately; consideration consists of debating, amending, accepting or rejecting. The vote required on each provision is two-thirds of the membership present instead of the usual majority. Because by-laws are the fundamental basis of the organization, they should be acceptable to as many members as possible.

By-laws can be amended at any time during the life of the organization. Any proposals for changes in the by-laws require prior notice in writing to the entire membership before acting upon the proposed amendments at any meeting.

## ELECTION OF OFFICERS

With the adoption of the by-laws providing for the type of officers for the organization, and the length of their terms, the organization proceeds to elect such officers. The usual officers for most groups are a president, vice-president, recording secretary, corresponding secretary, treasurer, sergeant at arms, and committees. Some have an executive secretary, a paid job, but an organization would have to be large to warrant a paid official.

All members are eligible for office when an organization is first formed. But later the by-laws may require a certain minimum period of membership as a qualification to hold office. Nominations are made by the simple statement: "I nominate so-and-so." The nominations do not require a second and a majority vote is necessary for election.

## DUTIES OF OFFICERS

**President:** The president, as in government, is top man in an organization. Some organizations call this official "chairman." President sounds better, and is more appropriate when he performs not only the functions of presiding at meetings, but other duties in directing the organization. Chairman is the proper designation for one elected only to preside at a meeting.

Their duties as presiding officers are identical, regardless of title; they call the meeting to order, then present the order of business which the meeting is to act upon. They recognize members who desire the floor for a proposal or a discussion. They are supposed to see that everyone who wishes to speak has the opportunity, and to do as little talking themselves as possible. The presiding officer has the right to take part in a discussion. When he does, the vice-chairman should take the chair until the presiding officer has concluded his talk.

A chairman is really a moderator who directs, controls and regulates proceedings. He is neither a boss nor an antagonist and is not to be regarded as such by the members. It is the chairman's primary job to keep the meetings moving smoothly. He should prevent members from abusing their privileges without interference, but should not curb their rights. The chair must entertain all motions that are seconded and must restate them for the members. He must call for a vote on motions and declare the motion adopted or defeated on the basis of the vote. He should allow for a re-count or a roll call whenever requested to do so. When referring to himself, the presiding officer usually says: "The chair recognizes Mr. Blank" instead of "I recognize Mr. Blank."

The president or permanent chairman is usually an ex-officio member of all committees. Although he is not obligated to attend all meetings, he may if he so desires.

**Secretary:** The duties of a secretary are to keep the records of the organization, to record the minutes of the meetings, to handle the correspondence (unless the organization is large enough to require a corresponding secretary), such as notifying members of regular meetings or of a special meeting, reading the minutes at the meeting, etc.

The minutes of a secretary should indicate when the meeting was held, where it took place, who presided, what business was transacted, when the meeting adjourned, etc.

**Treasurer:** The treasurer's duties are to handle the funds of the organization, to collect the dues, to pay the bills when

authorized, to keep the books for the organization with records of income and expenditures, and to render reports on finances at the regular meetings.

**Sergeant-at-Arms:** The duties of the sergeant-at-arms are to assist the chairman in preserving order among the people present at a meeting, members and visitors, to act as a sort of usher by checking people at the door to see that only those entitled to be present at the meeting are admitted, and to escort anyone out if requested to do so by the chairman.

### COMMITTEES

The purpose of committees is to expedite the transaction of business on matters that require more time than the meeting permits, or on matters that require time for investigation and special study. Committees are essential in a large organization, but are really not necessary for a small group that can handle its limited business at the regular membership meetings.

The types of committee may vary according to the needs of an organization. A "standing" committee has a fixed term of office and gives continuous service. A "special" committee serves temporarily to investigate and report on some special project or condition.

The top committee in most organizations is the executive committee, sometimes made up of the chairmen of the various committees, sometimes selected from the general membership. Other committees are: membership committees, athletic committees, education committees, social or house committees, committees on finance, temporary committees to deal with a temporary specific problem, etc.

Committees may be appointed by the presiding officer, or be elected by the group, depending upon the by-laws. We think it best for committees to be elected by the membership. The chairman of the committee is either designated by the presiding officer, elected by the committee, or is the person obtaining the most votes in the election. Committees should consist of an odd number of members to assure a majority vote and a minimum of ~~s~~alemates. As far as possible, the by-laws governing

the conduct of a meeting or organization govern the committees as well.

Most committees are usually made up of small groups and, therefore, their meetings are less formal than regular organization meetings. Motions do not require seconding, speeches are not as restricted and limited, and the chairman attending the committee, or the president of the organization, if attending the committee meeting, participates in the discussions on a par with the other members.

Providing for numerous officers is a good thing because it distributes responsibility among more members. This is important to keep in mind in connection with committees; while good people should be placed on many committees, it is best and advisable to have as many members on committees as possible.

The committee chairman reports for the committee to the general membership meeting. Reports of the committee may consist only of information requiring no action or may contain recommendations for certain action which is often the equivalent of a proposed motion.

When there is a difference of opinion among committee members, the majority report offered is considered the committee report. The dissenting members have the right, however, to submit a minority report proposing a different course of action. Both reports must be heard or read at the same meeting. No action on the majority report is in order until the minority report is disposed of. It can be disposed of in either of two ways. (a) Any member may object to consideration of the minority report and such objection must be voted on immediately without debate. If carried, the minority report is dropped. (b) If the objection to consideration is not upheld, then a motion to substitute the minority report for the majority report is in order. If this motion is carried, the majority report is eliminated and the minority report becomes the committee report and is the only report before the body. If the motion to substitute is not carried, then the meeting proceeds to deal with the majority report.

It is well to bear in mind that any report or motion belongs to the membership.



If they are not satisfied with either report, they can dissolve the committee and act directly from the floor or appoint a new committee.

The chairman of the committee calls the meetings of the committee. If he fails or refuses to do so, or if he is absent, any two members of the committee may call a meeting. The chairman of a committee usually acts as its secretary.

If a committee fails to render a report on a matter referred to it within a reasonable time, the membership may force it to do so by drawing up a petition bearing the number of signatures required in the by-laws. This is called **discharging a committee**.

### ORDER OF BUSINESS

The chairman calls the meeting to order. He must determine whether a quorum is present. The number of members required to constitute a quorum is stipulated in the by-laws, usually one more than half of the membership, or as low as one-tenth of the membership. Without a quorum, business cannot be legally conducted. The secretary reads the minutes of the previous meeting and they are adopted, perhaps with corrections, or, as read. Officers and committees make any reports they have. Old business left over from the previous meeting is transacted. New business is brought up, discussed and acted upon. At the close, the chairman says that he will entertain a motion for adjournment.

### RULES OF DEBATE

The presiding officers should first recognize the mover of a proposal, or the member of a committee presenting a report, and should try to alternate recognition between those favoring and those opposing a proposition. Any member is entitled to speak on the main question and on each amendment as presented. He must confine himself to the question under consideration, must avoid personalities, and must not accuse others of ill motives. In some groups the by-laws limit each speaker to a fixed number of minutes. The meeting may vote to extend the time of a speaker if it so desires. Debate can only be halted by a motion for the **previous question** and a two-thirds vote is required.

### VOTING RULES

There are several methods of taking a vote. The simplest is by voice—"ayes" and "noes." This may be challenged by any member who thinks that the chairman did not hear correctly, in which case the vote is taken by a show of hands, or by standing. Roll call votes, recorded by the secretary, are required in some instances. The closed ballot (written votes) also is commonly used, especially in the election of officers. Only attending members may vote, unless the by-laws specifically permit proxy voting. A tie vote defeats a motion. The chairman is allowed to break a tie, though, if he has not previously voted. Some organizations permit a chairman to vote only in case of a tie, while others allow him to vote as a regular member.

A majority vote is generally required to pass ordinary motions or to adopt ordinary actions. There are certain motions which require a two-thirds vote of those present. These generally include the following: amendments to the by-laws, to take up a question out of its proper order, to suspend the rules, to support an objection to the consideration of a question, to take up the previous question, to limit debate, to expel a member or officer, to discharge a committee, or to refer back to a committee. No vote can be made unanimous if even one member present objects.

### WHAT HAPPENS TO A MOTION

A motion is a proposal for action by an organization. It is made by any member who asks the chair for the floor and is properly recognized. Most motions require a second before being placed before the group. Not more than one main motion may be considered at a time. The procedure is simple. One merely says, "I move the following." The chairman then asks if anyone seconds the motion. If it is properly seconded, the chairman announces that a motion has been made and seconded, calls for a discussion and repeats the motion on request. A motion may be voted on without discussion, but discussion is required if requested by any member.

A motion causes many things to happen. It provokes debate, suggests modifications,

clarifies the thinking and expresses the will of the group on a question. Once a motion is presented to the membership, it belongs to them to treat and dispose of in any one of several ways and can only be withdrawn with the consent of the membership.

A motion may be amended. This means that the motion may be modified or qualified by adding, substituting, or eliminating words or whole paragraphs. These changes must be relevant to the main motion.

For example, a motion is made for the organization to publish a magazine and stipulates (a) the publication to be a monthly, (b) to have two editors, (c) to cost the members \$1.00 a year, etc. This motion may be amended as follows: (a) to substitute "weekly" for "monthly," (b) to provide salaries for the two editors, (c) to eliminate the dollar charge for the magazine. All these amendments are in order because while the original motion has been amplified or qualified by the amendments, the proposal for publishing a magazine still prevails.

Amendments that are irrelevant are not permissible, such as an amendment requiring the editors to watch television. This is improper (perhaps for other reasons) because it is extraneous to the main question of proposing the publication of a magazine.

Amendments that negate the purpose of the motion, such as a proposal that the organization should not publish a magazine, are out of order because if the membership is entirely opposed to the idea, it can vote against the main motion or dismiss it in other parliamentary ways.

Other important rules governing amendments are:

1. There is no limit to the number of amendments that may be offered, but each amendment must be disposed of before a new one may be proposed.

2. After all amendments have been acted on, the meeting votes on the main motion, and all of the adopted amendments are incorporated in the main motion.

3. All amendments require a majority vote for passage.

4. A rejected amendment may not be resubmitted in identical form and no amend-

ment may be offered reversing an amendment previously adopted.

This is not all that can happen to a motion. In addition to amendments to the motion, you are also permitted to make amendments to the amendments. For example, the original motion stipulates that the magazine should have two editors. An amendment provides that the editors be paid salaries. This amendment can be amended to provide what the salary should be.

Now, if you are thinking of whether you can amend the amendment to the amendment, the answer is "No." Although this has really gone far enough, there is something else you are allowed to do, for better or worse, and that is to introduce a substitute for the motion itself or for any of the amendments or for everything that has been proposed on the question. The substitute for an amendment does not modify the amendment, but replaces it and is subject to the same rules that apply to amendments.

When amendments pile up to the point of confusing the membership, resorting to a substitute for the entire proposition may be helpful. The best way to do this, under the circumstances, is for someone to move to have a special committee designated to prepare a substitute motion for the whole.

If the motion is adopted, the committee-elect should withdraw from the meeting to try to reconcile any contradictions contained in the motion or the amendments. It should bring forth a clear substitute that expresses the intentions of most of the proposals.

Let us not lose sight of the fact that the purpose of a motion is not to create an endless chain of acts, but to get something done. In this connection, it is well to bear in mind that the motion and amendments do not necessarily conflict and that the proposer of a motion may accept the amendments without discussion or vote.

**Motions that cannot be amended:** These include such motions as questions of order or appeal, objections to consideration of the question, or motions to adjourn, to call for the order of the day, to vote, to withdraw a motion, to take up a question out

of proper order, to suspend the rules, to table, to take from the table, to reconsider, to consider the previous question, to postpone indefinitely, to amend an amendment, or to nominate. Motions to postpone indefinitely, to limit debate, or to recess can be amended as to time only.

#### DELAYING OR CANCELING CONSIDERATION OF A MOTION

It is not binding on a meeting to deal with a motion at the time it is proposed. On the contrary, the membership has the choice of postponing or renewing consideration of a motion. Here are some of the ways to attain such objectives.

**Objection to consideration:** Consideration of any issue may be stopped before discussion begins on the question, even though it involves interrupting the speaker, by objecting to its consideration. This objection may be made by any member and does not require a second. Objection to consideration calls for an immediate vote without debate or amendment and requires a two-thirds vote. If carried, the motion is dropped for all time. The purpose of the act is to prevent the meeting from dealing with a question that may be offensive. This reason should be primary. Other reasons may be because it might waste the time of the meeting or it may be inappropriate to deal with the question at the time. This action is very drastic and should not be employed to gag any member except the village idiot at his worst.

**Motion to postpone indefinitely:** This is a polite way of killing a motion, at least for the moment. It differs from "Objection to consideration" insofar as the motion to postpone indefinitely and the motion itself are debatable and cannot be made while a member has the floor. This motion requires a second and calls for a majority vote. It cannot be amended and cannot be brought up again.

**Motion to "lay on the table":** If the meeting does not want to consider the motion at all, the procedure is to make a motion to "lay the question on the table." This suspends consideration of the main motion and amendments until such time

as the group chooses to take it up again, which can be later at the same meeting after other business has been transacted or at any subsequent meeting. This motion must be seconded, requires a majority vote, may not be debated or amended or postponed. The only way to bring the motion back is to move to "take it off the table."

**Motion to postpone to a definite date:** This is an expression of the will of the meeting to put off consideration of the proposal until later in the same session or until a subsequent meeting. The object of such an act is to delay consideration of the question until more members are present, or to enable members to acquire further information before making their decisions. This motion is debatable only as to the advisability of postponement. The subject matter of the motion is not debatable. It is open for amendment as to time only and requires a majority vote.

**Motion to refer to a committee:** This is usually done if a meeting feels that a question requires more time and information before it acts upon it. A motion to refer to a committee names an existing committee or creates a special committee for its consideration and may be accompanied by instructions. Seconding and a majority vote are required for passage of this motion. It can be debated only as to the desirability and advisability of referring it to the committee. It can be amended only as to the nature of the committee and as to the instructions.

#### HOW TO REOPEN A QUESTION

To avoid finality of decisions that may be harmful to the best interests of the members, certain actions previously taken by the members are subject to review by them. Such review may apply to matters acted upon, matters postponed, or matters delegated to committees.

**Motion to reconsider:** This deals with something acted upon by a meeting which the members would like to reconsider at another time during the same meeting. It is a motion that should be made by one who has voted with the majority, whether in the affirmative or the negative, and is



made because the voter has changed his mind on the matter in the light of new information. Very often a member deliberately votes for or against motions so that he can move for reconsideration of the subject later in the meeting when there may be a better chance for passing or defeating the motion because more members are present or because he will have an opportunity to persuade other members to change their votes. This is both good parliamentary procedure and democratic.

A motion to reconsider requires a second, a majority vote, is debatable and cannot be renewed. If a motion to reconsider is carried, the question is before the assembly with its original parliamentary status. Motions that cannot be reconsidered include: motions to take from the table, to lay on the table, or a motion for indefinite postponement that has been defeated.

**To take from the table:** This motion allows a group to take up a subject that was set aside by a motion to table it at a previous meeting. This resumption of consideration on a question rates priority over any new motions and can be introduced when there is no other business before the body. Motion to take a question from the table requires a second and a majority vote, is not debatable and cannot be amended.

**A motion to rescind:** This motion enables the membership to re-evaluate some action taken in the past because it may have been adopted without full understanding of the consequences at that time. The point of rescinding a previous act of an organization does not apply to any legally binding act committing the organization, nor to the election of members or officers. This motion calls for a second and majority vote unless the original motion involved required a two-thirds vote. It is debatable and cannot be amended.

Several important techniques for keeping informed about proceedings, preventing violations and protecting the rights of members, correcting errors, and expediting the business at hand, are:

**Moving the Previous Question:** This asks that the discussion be stopped at once on any motion before the body. A move for the previous question cannot interrupt the speaker. It requires a second, is not de-

batable, cannot be amended, and requires a two-thirds vote. Its purpose is to say "Let's stop talking and vote."

**Point of Information:** This is a method of obtaining information about what is occurring through the medium of the chairman or the speaker. This interruption request is permissible even when one is speaking. It is unusual for the speaker or the chair to ignore such a request. Since it is intended only to secure information, it is not proper to use this as a device to make a statement or delay proceedings.

**Point of Order:** This questions the correctness of any action at the time it occurs. The only time that a point of order can be employed *after* an action has taken place, is if it involves a violation of by-laws, constitution, or the law. It is raised on the basis of a mistake or omission in procedure, of a violation of the rules of the organization, of decorum in debate, or of irrelevancy of debate and procedure. A point of order needs no seconding, cannot be amended and requires no vote.

A point of order may be raised by any member at any time. It is in the nature of a demand addressed to the chair, which is required to act immediately on the point of order raised. The procedure is as follows: A member announces, "I rise to a point of order." This automatically halts any discussion or action until the chairman rules on the point of order. If the chairman concurs, he announces that the point of order was well taken, and proceeds to correct whatever is in question.

**Appeal:** If any other member takes exception to this ruling, he may appeal from the decision of the chair. Another basis for an appeal may result when the chair declares the point of order not well taken. This appeal is usually made by the person raising the point of order. All appeals require a second, are debatable and are subject to a majority vote of the membership. If they vote for the appeal, the chairman's decision is reversed. If they vote against the appeal, the chairman's decision is upheld. In the event of a tie vote, the chairman is sustained. If the chairman is a member of the organization, he has the right to vote and may make the tie.

Discussions on some appeals are not customary, such as questions of indecorum, violation of rules of speaking, or order of business.

Sometimes the chairman is in doubt on a point of order. When he is, he may defer to someone present for advice, or ask the members to discuss and vote on the point of order. This is the only time that a point of order is debatable. Their vote determines the chairman's decision.

**Motion to adjourn:** This motion is in order at any time, but should be employed with discretion. Obviously, it should not interfere with the organization's efforts to get business done. This motion requires a second, is not debatable, cannot be amended, and must be voted on immediately. A majority vote is necessary. Any motion for adjournment that refers to a specific time or place for the next meeting is subject to debate and amendment.

We have tried to project the reader into actual participation in the forming of an organization and the conduct of a meeting, and we have given more attention to the processes than to the discussion of technical rules. In following this course, we may have omitted some matters that do not occur at every meeting, but that do happen occasionally and should be understood.

**Removal of officers:** This is sometimes an unhappy necessity. Misconduct of an officer may involve neglect of duties, abuse of privileges or incompetence. The removal of an officer is accomplished by preferring charges which should be of a serious nature and supported by proof. The charges may be considered at a general meeting or referred to a committee to investigate and to recommend a course of action. A two-thirds vote of the members present is required to remove an officer. A motion to remove an officer is debatable.

**Expulsion of members:** If a member violates his obligations and duties or is involved in an act that may bring disrepute to the organization, he is subject to charges and a hearing before a committee or the membership and can be expelled by a two-thirds vote. This action is debatable. Obviously, such actions should not be undertaken unless the charges are serious and

supported by substantial proof. It would be deplorable if the exercise of such a drastic action were based on a frivolous issue or personal bias. Sometimes the behavior of a member at a meeting requires disciplinary action in the form of a motion for immediate expulsion. This is not debatable and requires a two-thirds vote.

**Question of privilege:** A member may interrupt a meeting at any time to raise a question involving the comfort or convenience of the membership. It may concern such matters as the physical condition of the meeting hall, the seating of the members, the conduct of persons present, or the ability to hear speakers. This request requires no second, is not debatable, cannot be amended and is decided by the chair.

**Suspension of the rules:** The object of a proposal to suspend the rules is to permit a meeting to do something that is ordinarily prohibited by the rules of parliamentary procedure or by the adopted order of business. The suspension of rules is generally employed to deal with an emergency or special condition, such as permitting a guest speaker to start earlier than scheduled or allowing for the interruption of the regular order of business by a visiting committee. There are other circumstances under which the suspension of rules is permitted, but these cases are too complicated to be treated here. This motion cannot interrupt a speaker, requires a second, cannot be debated or amended, and requires a two-thirds vote.

We have endeavored to outline some of the basic rules for the benefit of the many people who want some simple knowledge of how to form an organization, how to conduct a meeting, or how to participate in one; also to help spectators at a convention understand what is going on. Beyond this, we refer you to the authorities on parliamentary procedure.

However important rules are for guidance in most human activities, there is no doubt that much is accomplished through informal discussion and action, and we do not hesitate to urge small friendly groups to do their business with as little formality and as few restrictions as possible. If this does not always work, we hope our book is there to serve you.

# CONTRACT BRIDGE SYSTEMS

by Florence Osborn  
Bridge Editor, New York Herald Tribune

**T**HE BEST and most widely played contract bridge system—the Culbertson approach-forcing system—is basically the same today as it was 25 years ago.

This system limits use of artificial or conventional bids to specific situations, so that the whole bidding language is easily understood by partners and opponents.

There is a definite revival of interest in the point-count method of valuing a bridge hand to determine potential winners, as opposed to the Culbertson honor-trick method of counting high cards. The Work 4-3-2-1 point-count, introduced by the late Milton C. Work is most accurate for no-trump bidding, whereas the honor-trick method is most accurate for suit bidding.

Charles H. Goren, highest-ranking player of the American Contract Bridge League, has extended use of the point-count into suit bidding and uses it throughout his system, which, other than for the count, is the same as Culbertson's.

In 1954, Culbertson issued his version of point-count as applied to both suit and no-trump bidding. His approach-forcing system has undergone no serious change, but it now may be interpreted in points or honor-tricks, according to preference.

Bridge players can play according to Culbertson or Goren with no misunderstanding. The two agree on all fundamental points. They differ on the *method* of counting distribution, Culbertson counting length, Goren shortness, but the points add up the same.

Following is a digest of the new Culbertson system with both point and honor-trick requirements; following this is the Goren method of counting distribution.

## CULBERTSON METHOD Point-Count Table

Ace —4 pts.	} Add 1 point for all 4 aces. Deduct 1 point for single K, Q or J.
King —3 pts.	
Queen—2 pts.	
Jack —1 pt.	
Average hand: 10 pts. The Deck: 40 pts.	

## Honor-Trick Table

2 H. T.	
A-K in same suit	
1½ H. T.	
A-Q in same suit	
1 H. T.	
Ace	
K-Q in same suit	
K-J-10 in same suit	
K-x and K-x	

½ H. T.

K-x

Q-J-x

Q-x and Q-x

Average hand: 2-2½ H. T.

The deck: 8-8½ H. T.

## Game and Slam Expectancies

26 points or 6-6½ H. T. in combined hands will produce game at no-trump or major suit, 29 points in minor.

33 points or 37 points (7-8 H. T.) respectively will produce a small slam or grand slam.

## OPENING SUIT-BIDS OF ONE

To the high-card count add 1 pt. for each card over *four* in the trump suit, and add 1 pt. for each card over *three* in all side suits. Note: Add 1 and 2 pts. for 100 and 150 honors.

13-pt. hands (3 H. T.) with a biddable suit (Q-J-x-x or better) may be opened.

14-pt. hands (3½ H. T.) should always be opened.

11- or 12-pt. hands (2+ to 2½ H. T.) and a good five-card or longer suit, may be opened.

In third position, open with 11 pts. (2+ H. T.) on a good suit.

In fourth position, open any 13-pt. hand (3 H. T.).

Note: All opening one-bids (except third or fourth hand) announce at least 2½ H. T. (defensive).

## RESPONSES TO SUIT-BIDS OF ONE

To your high-card count *add* the number of points obtained by subtracting your *shortest* suit from your trump length. *Deduct* 1 pt. if your hand has no four-card or longer side suit.

Raise partner's suit-bid to two (single raise) with 6-10 pts. (1½-2 H. T.).

Raise to three (double raise, forcing) with 13-16 pts. (3-3½ H. T.).

Respond one no-trump with 6-10 pts. (1½-2 H. T.) and a balanced hand.

Respond two no-trump with 13-15 pts. (3-3½ H. T.) and a balanced hand.

Respond three no-trump with 16-18 pts. (4 H. T.), all unbid suits stopped and 4-3-3-3 pattern.

Take out to your own suit at the one-level (forcing for one round) with 6 pts. (minimum) to 17 pts. (1½-3½ H. T.).

Take out to the one- or the two-level (forcing for one round) with 10 pts. (minimum) to 17 pts. (2-3½ H. T.).

Make a single jump takeout (forcing to game; suggests possible slam) with 18 pts. or more (4 or more H. T.).



### OPENING BIDS OF ONE NO-TRUMP AND RESPONSES

Open one no-trump with 16-18 pts. ( $3\frac{1}{2}$ -4+ H. T.), stoppers in three suits and at least Q-x in the fourth suit; provided the hand-pattern is 4-3-3-3, 4-4-3-2 (but not with both majors), 5-3-3-2 (if the long suit is a minor), and 6-3-2-2 (if the long suit is a strong minor).

Raise partner's opening one no-trump bid to two with 8-9 pts. ( $1\frac{1}{2}$ -2+ H. T.).

Raise to three no-trump with 10-14 pts. ( $2\frac{1}{2}$ -3 H. T.).

Make a small-slam try with 15-16 pts. ( $3\frac{1}{2}$  H. T.) or a direct small-slam bid with 17-20 pts. ( $4\frac{1}{2}$  H. T.). With 21 pts. ( $4\frac{1}{2}$  H. T.), proceed similarly for a grand slam. *Note:* A takeout of one no-trump to two of a suit is forcing for one round, but a rebid of the same suit at the three-level is a sign-off.

### OPENING BIDS OF TWO AND THREE NO-TRUMP AND RESPONSES

Open two no-trump with 22-24 pts. ( $5\frac{1}{2}$ -5+ H. T.), balanced distribution and all suits stopped.

Open three no-trump with 25-27 pts. ( $6\frac{1}{2}$ -6+ H. T.), all suits stopped and only 4-3-3-3 distribution. *Note:* With a no-trump hand but 19-21 pts. ( $4\frac{1}{2}$ -5+ H. T.), open with a one-bid in a suit.

Raise partner's two no-trump opening to three with 3-8 pts. ( $\frac{1}{2}$ - $1\frac{1}{2}$ + H. T.).

Try for a slam with 9 pts. (2 H. T.) or more. Any bid over an opening three no-trump is a slam try.

### OPENING TWO-BIDS IN A SUIT AND RESPONSES

This unconditionally forcing-to-game bid requires:

21-22 pts. ( $4\frac{1}{2}$ -5+ H. T.) with a solid or nearly solid (one loser) six-card or longer suit.

23-26 pts. ( $5\frac{1}{2}$ -6 H. T.) with a strong six-, five- or four-card suit.

Respond negatively by bidding two no-trump with 6 pts. (1+ H. T.) or less. *Exception:* Bid a higher-ranking suit such as A-Q-x-x or A-J-10-x.

Respond positively with a suit takeout, a raise (with adequate trump support), or a jump to three no-trump with 7 pts. (1-2 H. T.) or more.

### DEFENSIVE BIDDING

For overcalls (simple defense) and sacrifice bids (calculated overbids either as an opening bidder or defender) use:

#### Rule of Two and Three

When the opponents are bidding, and partner has passed or has made no bid, do not bid unless you can win, in your own hand,

Within 2 tricks of your contract if **VULNERABLE**, or

Within 3 tricks of your contract if **NOT VULNERABLE**.

Then you cannot be set more than 500 points, which would be the value of the opponents' game.

For strength-showing bids such as takeout doubles, no-trump overcalls and jump suit takeouts, you need 13-18 pts. (3-4 H. T.); for forcing cue bids, 19 pts. ( $4\frac{1}{2}$  H. T.) or more.

### When to Double for Penalties

Double when you can count enough *defensive winners* in the combined hands to defeat the opponents *at least two tricks*, or enough *certain winners* to defeat them one trick. Avoid doubling slams.

The expected penalty must be worth more than any contract your side can *surely* bid and make.

### GOREN POINT-COUNT DIFFERENCES

The valuation offered by Goren differs chiefly in the method of counting distributional values for opening suit bids and raises, Goren counting shortness instead of length as follows:

1. In opening bids of one in a suit, the value of a hand is determined by adding to the high-card point-count:

3 pts. for a void

2 pts. for each singleton

1 pt. for each doubleton.

2. In counting the dummy hand for raising partner's suit bid, add to the high-card point-count (plus promotional value of honors in partner's suit):

5 pts. for a void

3 pts. for each singleton

1 pt. for each doubleton.

Deduct 1 pt. if your hand contains only three trumps, also 1 pt. if your hand is distributed 4-3-3-3.

### BLACKWOOD SLAM CONVENTION

When either partner has bid a suit, a bid of four no-trump is forcing and requires partner to respond as follows: Five clubs, *lacking* an ace. Five diamonds, holding *one* ace. Five hearts, holding *two* aces. Five spades, holding *three* aces. Five no-trump (five clubs optional), holding *all four* aces.

If after one of these responses the four no-trump bidder bids *five* no-trump, his partner must then show kings on the same schedule at the six-level.

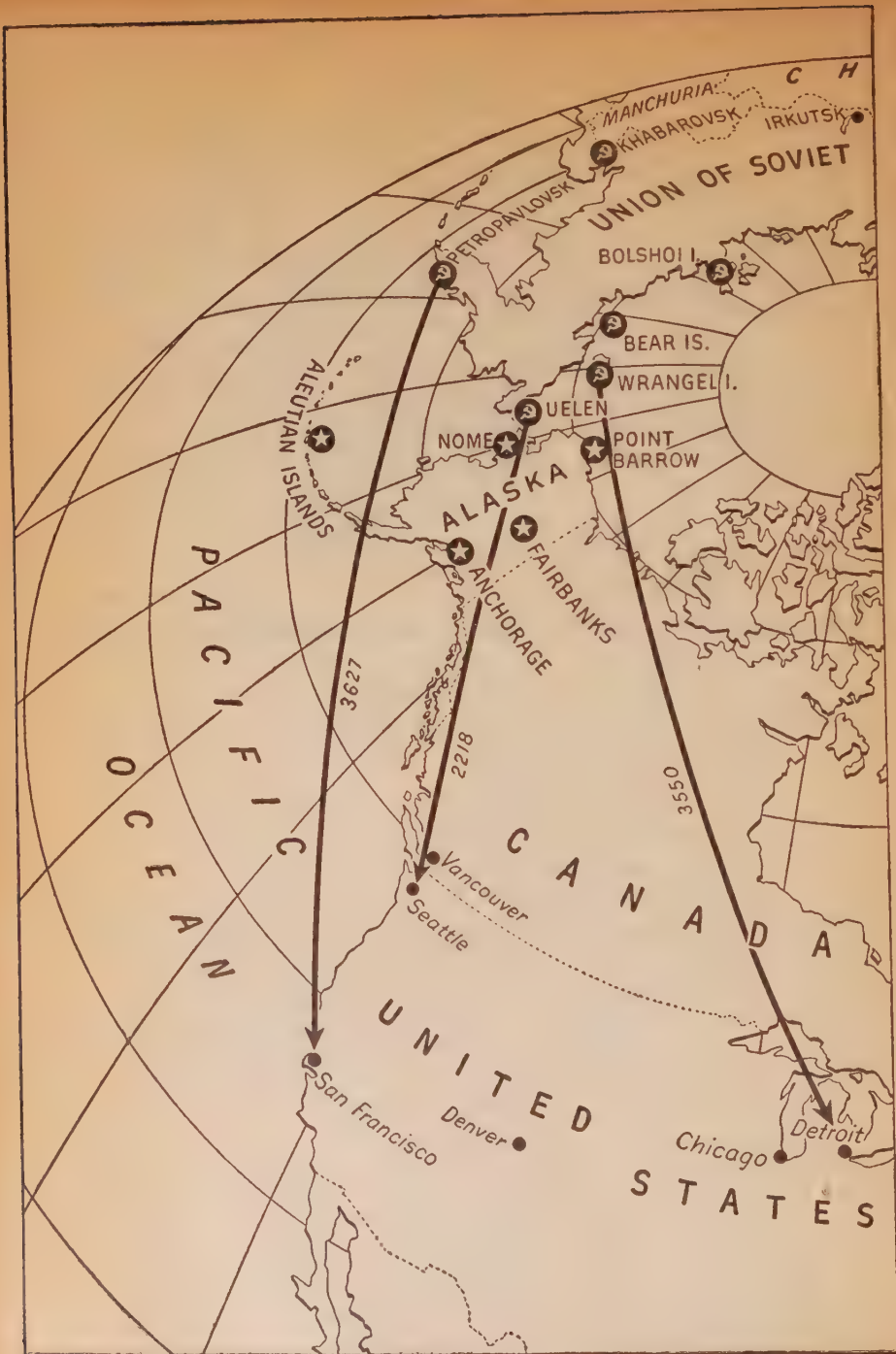
### STAYMAN NO-TRUMP CONVENTION

A response of *two clubs* to an opening bid of one no-trump, 16-18 pts. ( $3\frac{1}{2}$ -4+ H. T.), does not promise a club suit but asks the opener whether or not he has a four-card major suit as part of his no-trump bid. With a showable spade suit (Q-x-x-x or better), his rebid is two spades. With a showable heart suit his rebid is two hearts. If he has neither major his rebid is two diamonds with a *minimum* 16-pt. no-trump opening, and with a maximum 18-pt. opening his rebid is two no-trump.



**TROUBLED AREAS**—Indo-China boundary settlement as of July 21, 1954.  
India and Pakistan both claimed the Province of Kashmir.

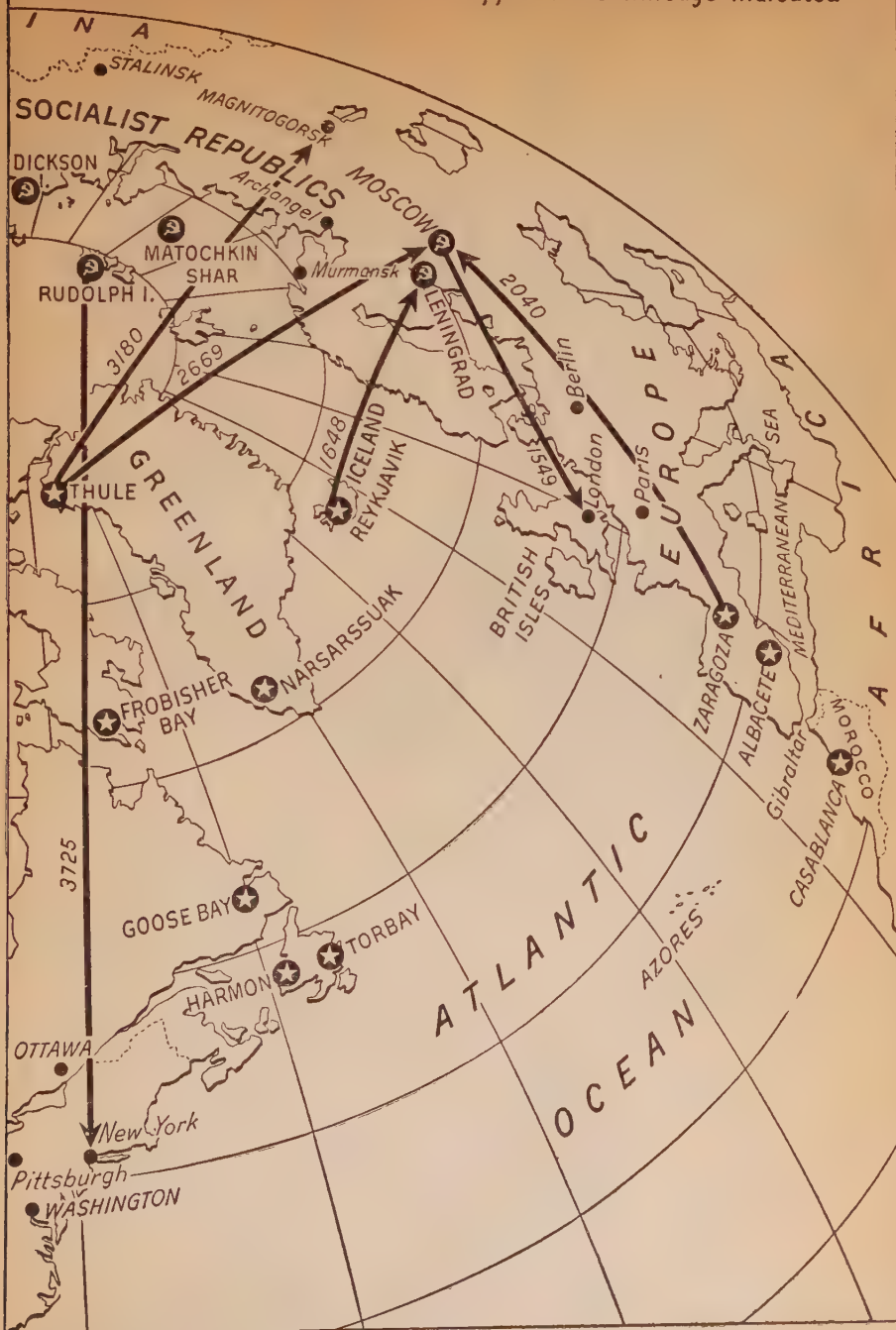




Air short-cuts across the top of the world. American



Approximate Mileage Indicated



bases are marked by a star, Russian bases by a sickle.













## EURASIA, 1954

Communist bloc

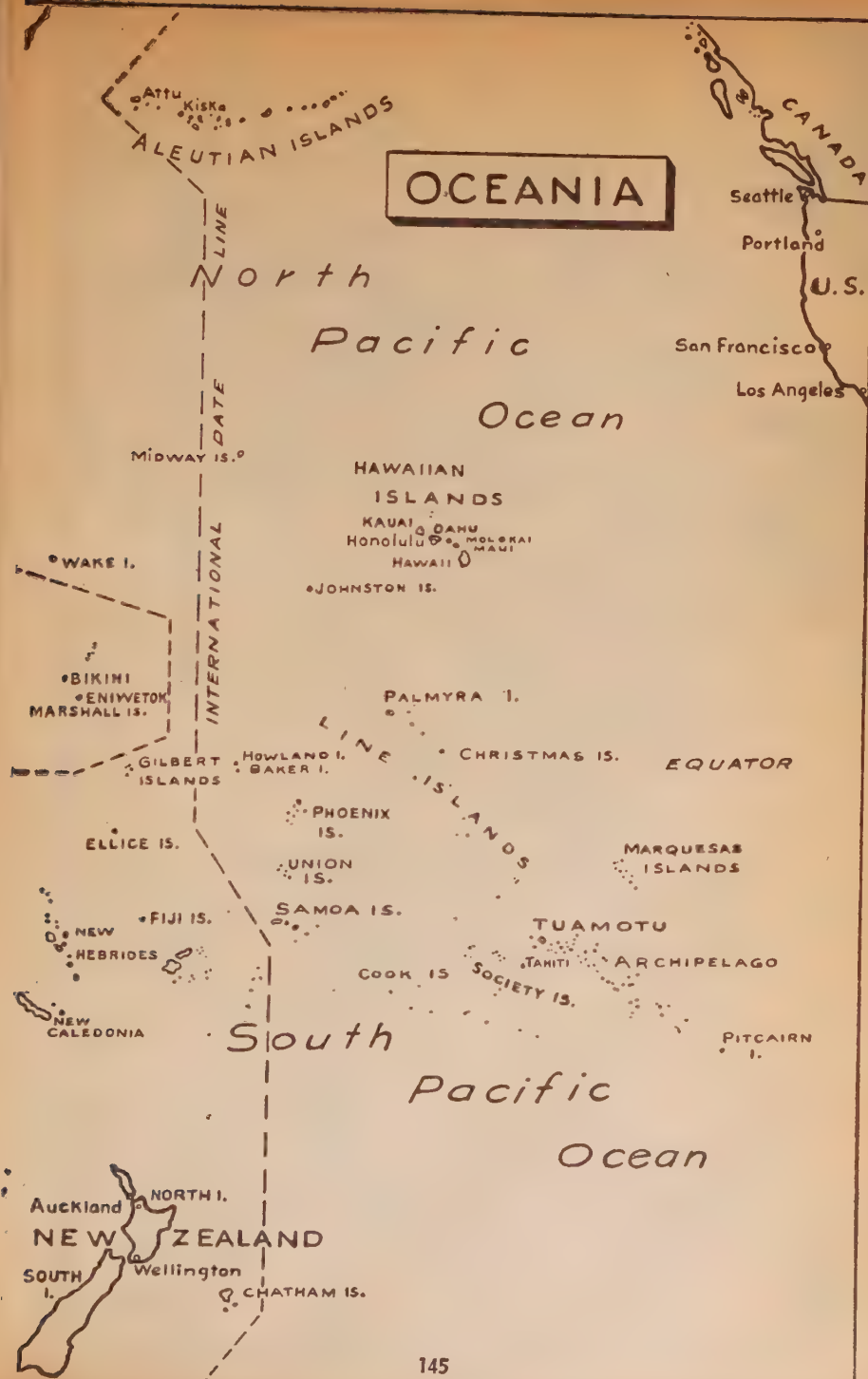
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KAUAI  
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OAHU  
MOLOKAI  
MAUI  
HAWAII

JOHNSTON IS.

WAKE I.

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ENIWETOK  
MARSHALL IS.

GILBERT  
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HOWLAND I.  
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EQUATOR

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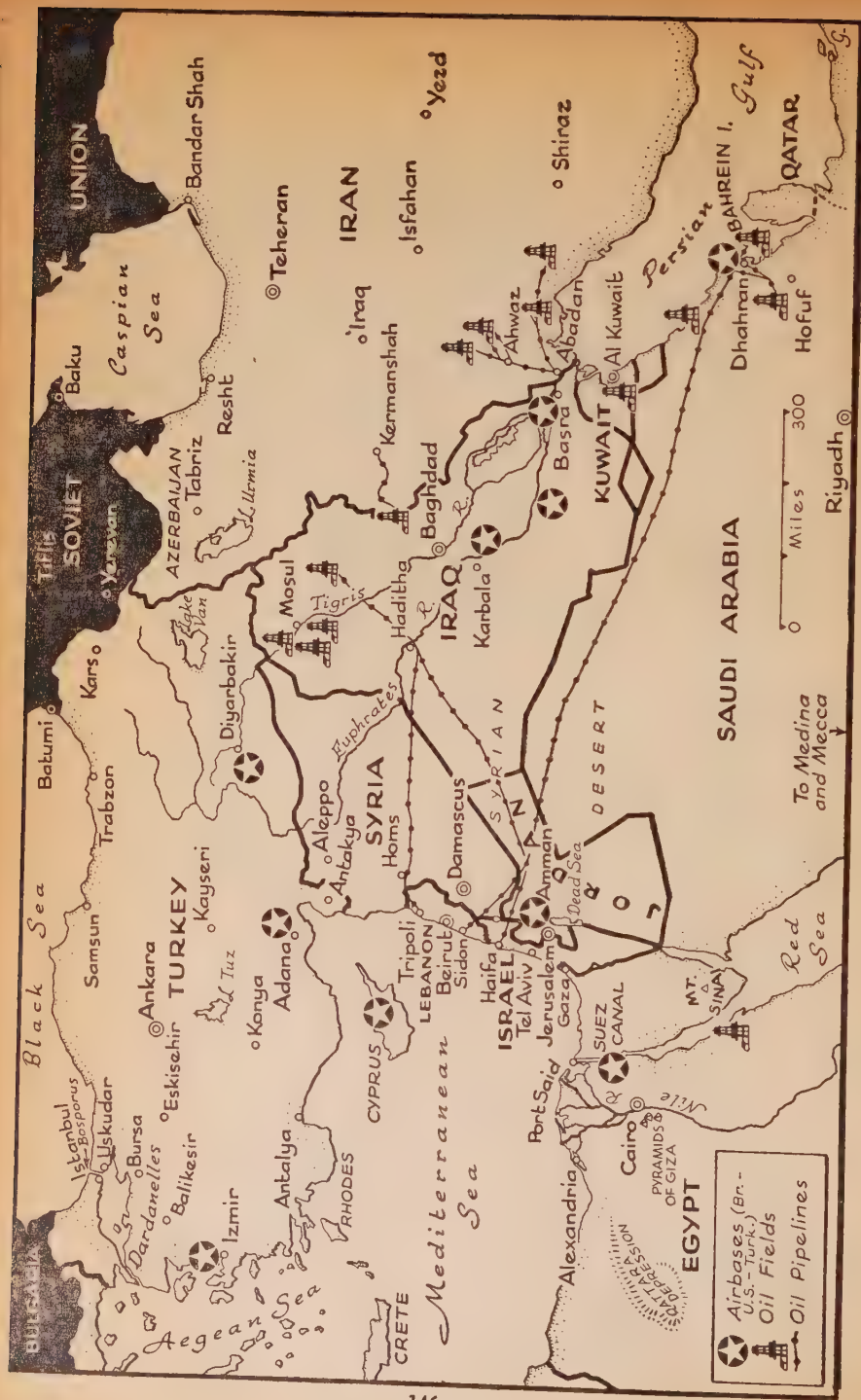
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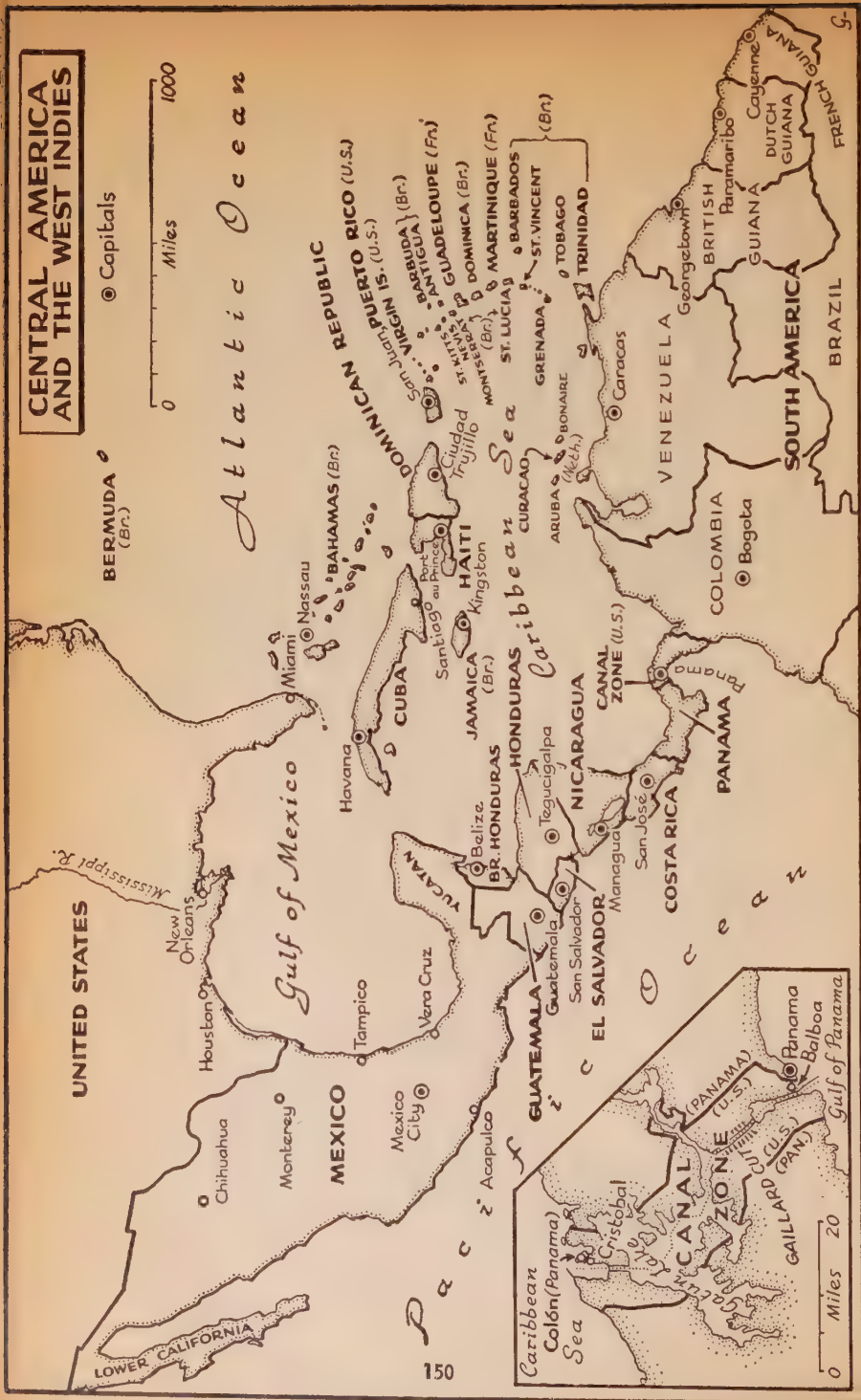
**NORTH  
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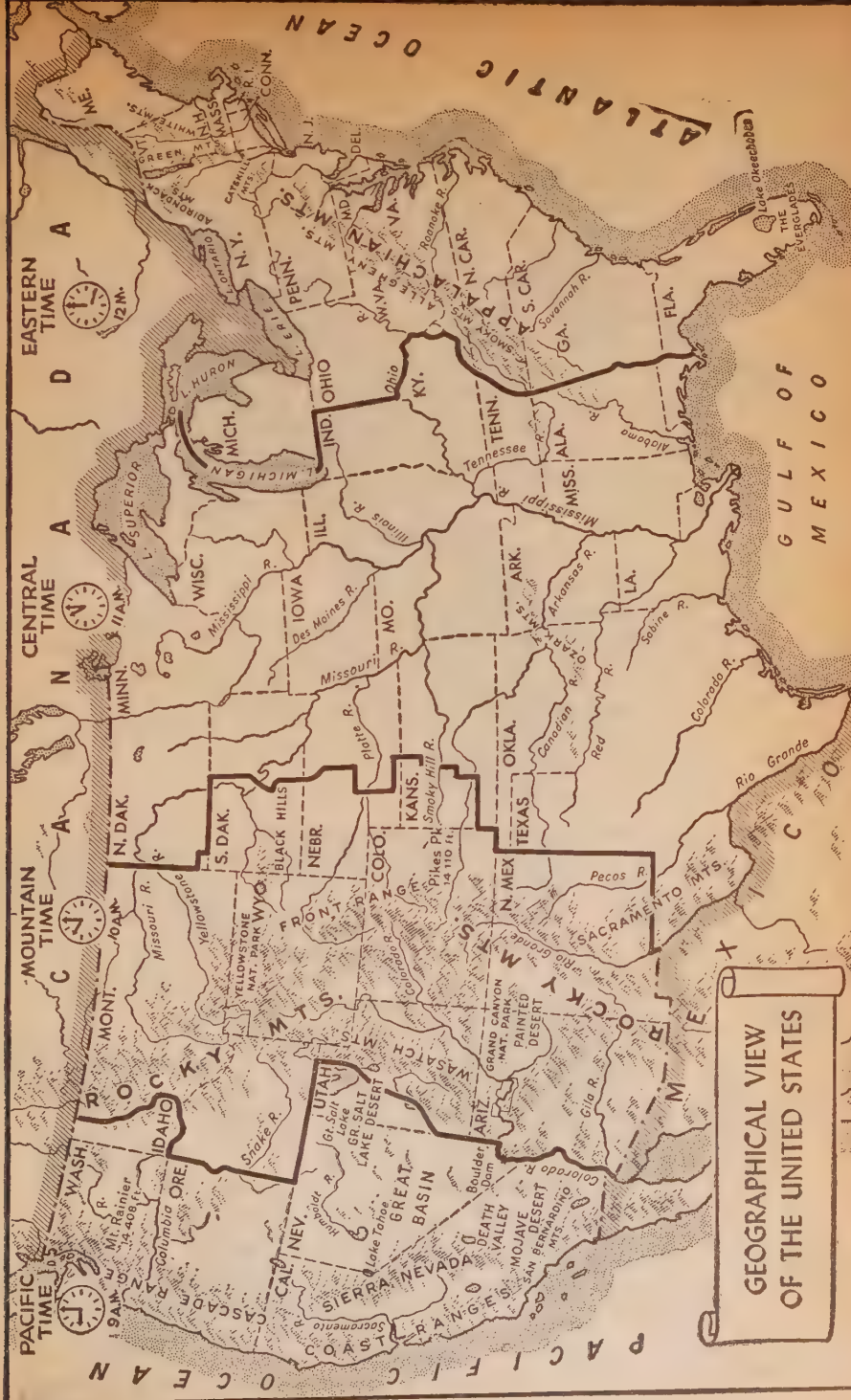
# CENTRAL AMERICA AND THE WEST INDIES

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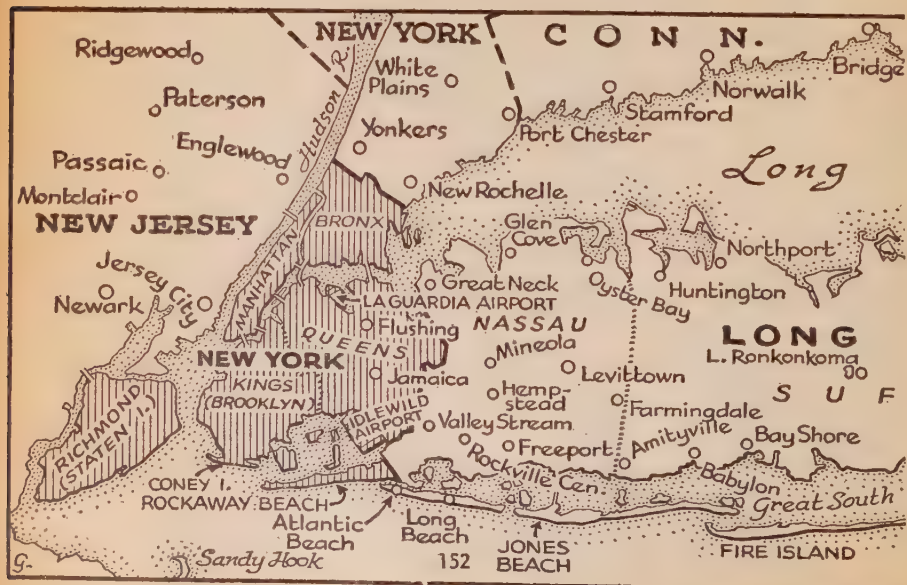
Atlantic Ocean

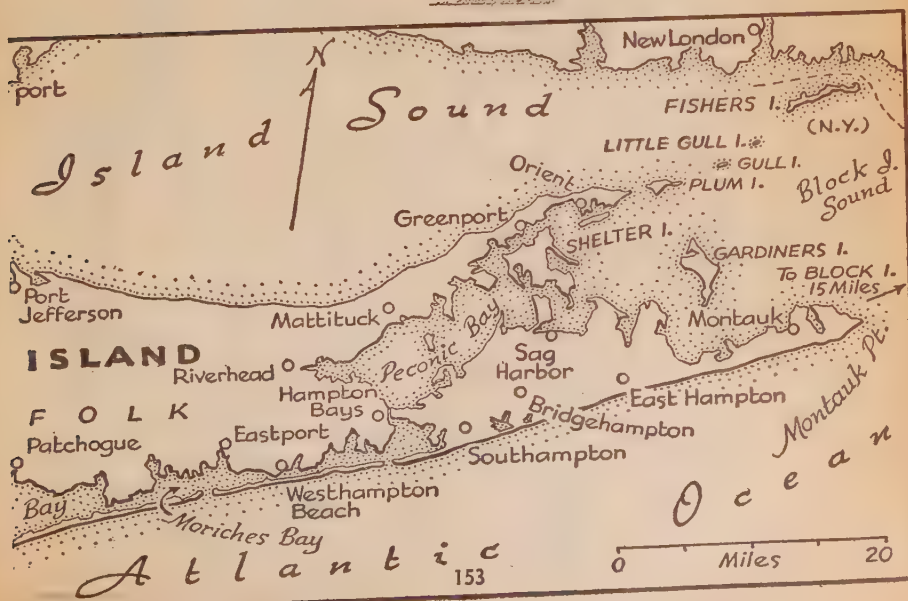




GEOGRAPHICAL VIEW  
OF THE UNITED STATES







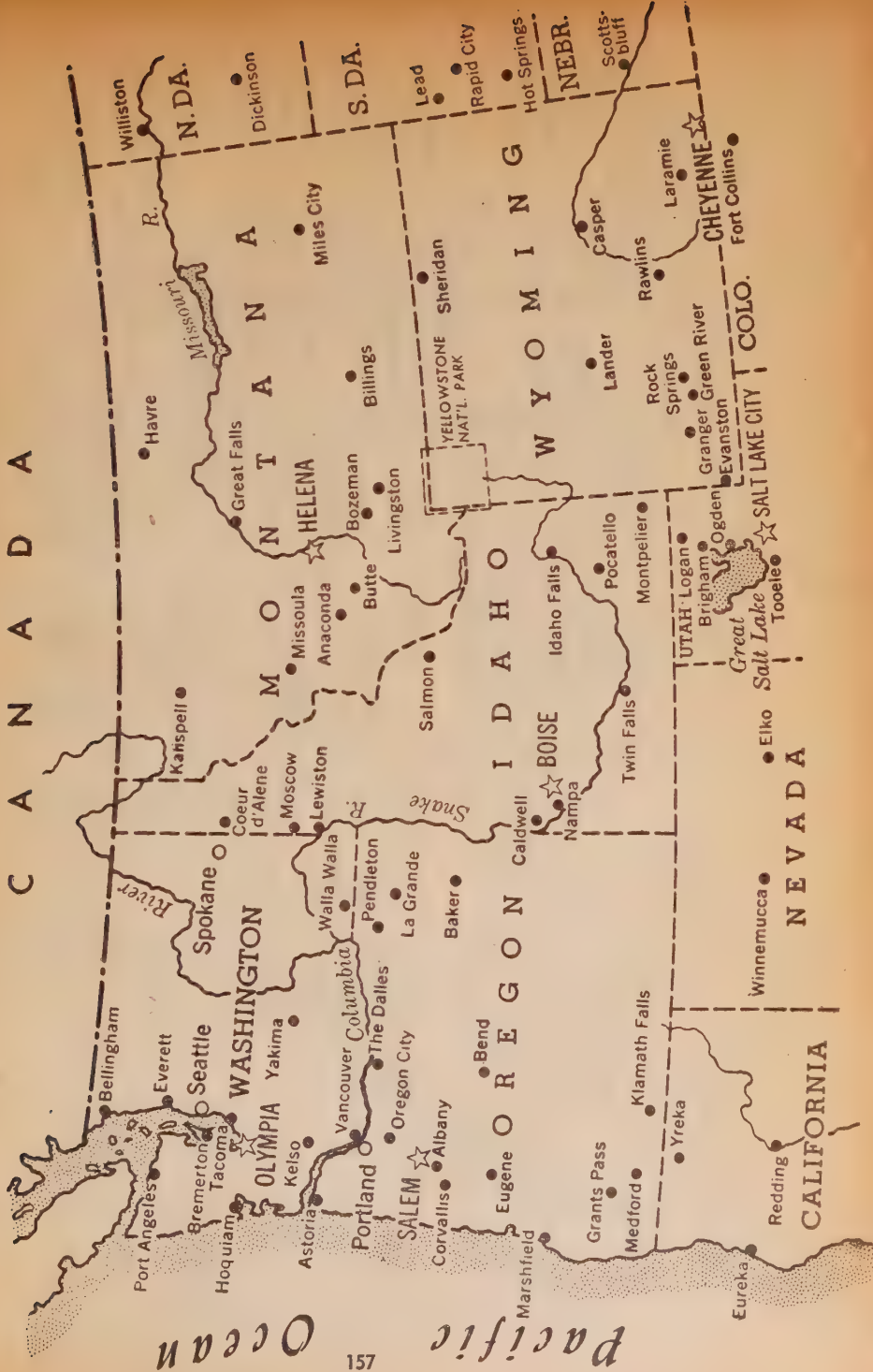


*Gulf of Mexico*

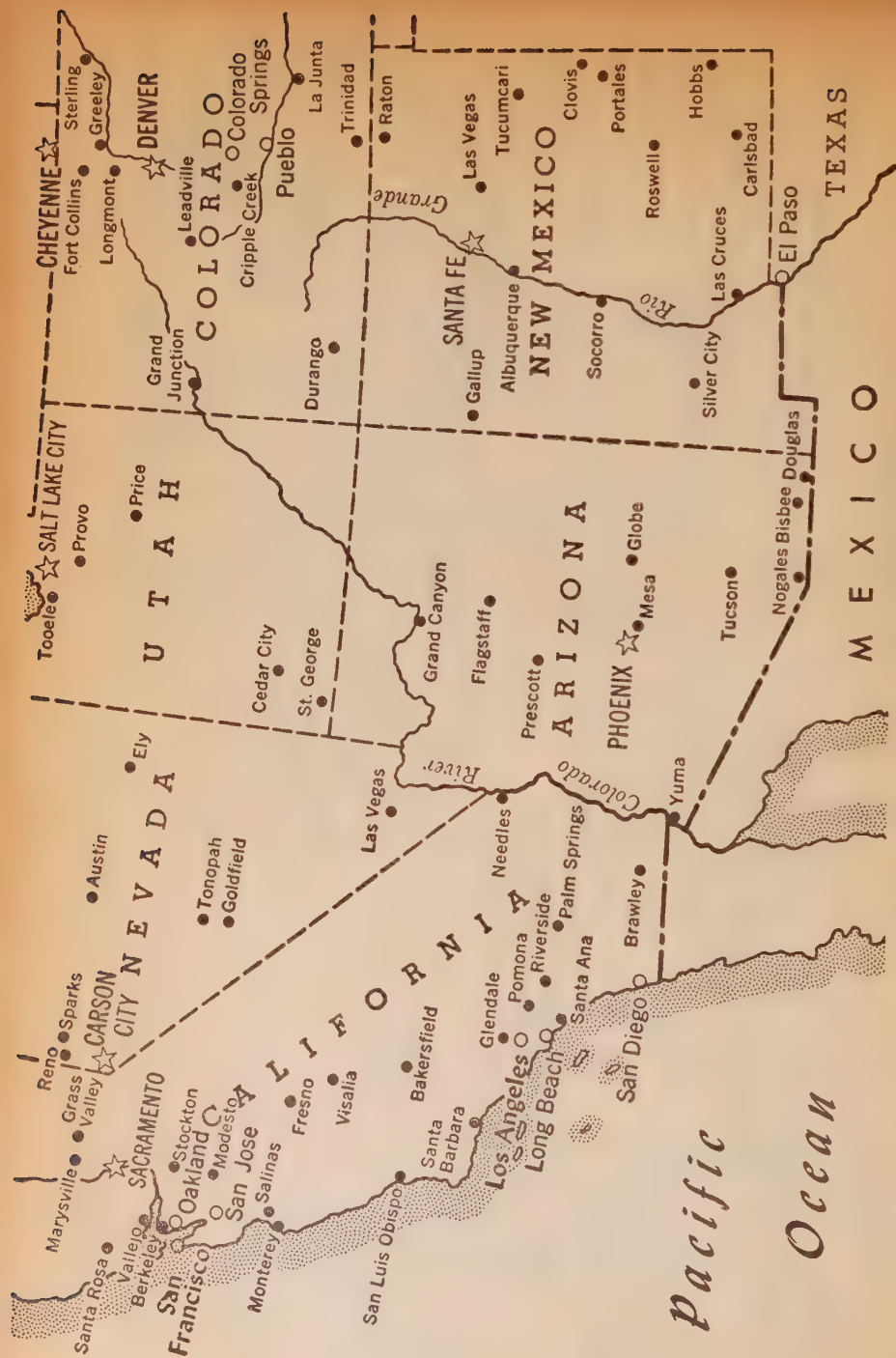












# THE UNITED STATES



## STATES, TERRITORIES AND CITIES

(State flower, bird, etc. are official unless otherwise indicated; dates in parentheses are those of adoption. Name of Governor is followed by party designation and date of expiration of term. Area is total of land and inland water. Estimated population figures for 1953 are as of July 1. Largest cities show 1950 Census, population and include incorporated places only.)

### ALABAMA

**Capital:** Montgomery.  
**Governor:** Gordon Persons (Dem., 1955).  
**Organized as territory:** Mar. 3, 1817.  
**Entered Union & (rank):** Dec. 14, 1819 (22).  
**Seceded from Union:** Jan. 11, 1861.  
**Re-entered Union:** July 13, 1868.  
**Present constitution adopted:** 1901.  
**Motto:** *Audemus jura nostra defendere* (We dare defend our rights).  
**State flower:** Goldenrod (1927).  
**State bird:** Yellowhammer (1927).  
**State song:** "Alabama" (1931).  
**Nickname:** Yellowhammer State.  
**Origin of name:** Disputed. May come from Choctaw meaning "thicket-clearers" or "vegetarian-gatherers."  
**1940 population & (rank):** 2,832,961 (17).  
**1950 population & (rank):** 3,061,743 (17).  
**1953 estimated population:** 3,114,000.  
**Area & (rank):** 51,609 sq. mi. (28).  
**Geographic center:** In Chilton Co., 12 mi. SW of Clanton.  
**Number of counties:** 67.  
**Largest cities:** Birmingham (326,037); Mobile (129,009); Montgomery (106,525); Gadsden (55,725); Tuscaloosa (46,396).  
**State forests:** 6 (14,248.58 ac.).  
**State parks:** 34 (39,619.6 ac.).  
**State general revenue (1953):** \$235,220,058.  
**State general expenditure (1953):** \$239,525,288.

Alabama is the biggest heavy-industry state in the South. Cotton goods, iron and steel and saw mill products lead Alabama's manufacturing, which is centered in the mills, mines and factories in and around Birmingham, the "Pittsburgh of the South." The state is also high in the growing of nuts, corn, hay and sweet potatoes. Other interests include the making of commercial fertilizer and shipping of raw cotton, iron and steel and hardwood lumber.

Muscle Shoals, on the Tennessee River, provides a great electric power source. At Tuskegee Institute, founded by Booker T. Washington, Dr. George Washington Carver carried out his famed agricultural research.

The Confederacy was founded at Montgomery in Feb., 1861, and for a time the city was the Confederate capital.

In 1540, Hernando de Soto and his treasure seekers were the first white men to see the state, although Cabeza de Vaca may have preceded him in 1528.

### ARIZONA

**Capital:** Phoenix.  
**Governor:** Howard Pyle (Rep., 1954).  
**Organized as territory:** Feb. 24, 1863.  
**Entered Union & (rank):** Feb. 14, 1912 (48).  
**Present constitution adopted:** 1911.  
**Motto:** *Ditat Deus* (God enriches).  
**State flower:** Flower of saguaro cactus (1931).  
**State bird:** Cactus wren (1931).  
**State colors:** Blue and old gold (1915).  
**State song:** "Arizona," a march song (1919).  
**State tree:** Palo Verde (1954).  
**Nickname:** Grand Canyon State.  
**Origin of name:** From the Indian "Arizonac," meaning "little spring."  
**1940 population & (rank):** 499,261 (43).  
**1950 population & (rank):** 749,587 (37).  
**1953 estimated population:** 930,000.  
**Area & (rank):** 113,909 sq. mi. (5).  
**Geographic center:** In Yavapai Co., 55 mi. SE of Prescott.  
**Number of counties:** 14.  
**Largest cities:** Phoenix (106,818); Tucson (45,454); Mesa (16,790); Douglas (9,442); Yuma (9,145).  
**State forests:** None.  
**State parks:** 3 (8,250 ac.).  
**State general revenue (1952-53):** \$42,538,862.  
**State general expenditure (1952-53):** \$37,576,999.

Agriculture is Arizona's largest revenue-producing industry. By means of irrigation, its once arid acres produce alfalfa, cotton, wheat, sorghum, vegetables, citrus fruits and dates. Income from livestock ranks high from both range and feeder cattle.

Mining of copper, gold, vanadium, uranium and silver ranks next among the industries, the production of copper exceeding that of any other state. Smelting and refining are leading activities.

Phoenix, its largest city, is both a popular health resort and a busy shipper of cotton and vegetables. Douglas loads cattle and smelts copper.

With the Hopi, Navajo (the largest in numbers) and Apache tribes, Arizona has the largest U. S. Indian population, spread over fourteen reservations. It also has some of the country's most famous scenery. In the north is the Grand Canyon; in the east is the Petrified Forest.

Marcos de Niza, a Franciscan friar, entered the state in 1539 in search of the mythical seven cities of Cibola, and was followed a year later by Coronado.

## ARKANSAS

**Capital:** Little Rock.  
**Governor:** Francis Cherry (Dem., 1955).  
**Organized as territory:** Mar. 2, 1819.  
**Entered Union & (rank):** June 15, 1836 (25).  
**Seceded from Union:** May 6, 1861.  
**Re-entered Union:** June 22, 1868.  
**Present constitution adopted:** 1874.  
**Motto:** *Regnat populus* (The people rule).  
**State flower:** Apple Blossom (1901).  
**State tree:** Pine (1939).  
**State bird:** Mockingbird.  
**State song:** "The Arkansas Traveler" (1949).  
**Nickname:** Land of Opportunity.  
**Origin of name:** From the Quapaw Indians.  
**1940 population & (rank):** 1,949,387 (24).  
**1950 population & (rank):** 1,909,511 (30).  
**1953 estimated population:** 1,909,000.  
**Area & (rank):** 53,102 sq. mi. (26).  
**Geographic center:** In Pulaski Co., 12 mi. N of W of Little Rock.  
**Number of counties:** 75.  
**Largest cities:** Little Rock (102,213); Fort Smith (47,942); North Little Rock (44,097); Pine Bluff (37,162); Hot Springs (29,307).  
**State forests:** None.  
**State parks:** 7 (17,907 ac.).  
**State general revenue (1951):** \$101,207,000.  
**State general expenditure (1951):** \$99,000,000.

About 90 per cent of the nation's bauxite—the source of aluminum—comes from the earth of Arkansas, which also contains North America's only known diamond mine, located in Pike County near Murfreesboro, and presently inactive.

Mostly flat, Arkansas has an equable southern climate and fertile central valleys which grow cotton, rice, wheat, corn, oats, potatoes and fruit. Other industries are oil production, lumbering and the production of wetstones and antimony ore.

Hot Springs entertains fifteen times its population in guests each year. Its forty-seven famous curative mineral springs, the only ones administered by the Federal Government, are in Hot Springs National Park in the Ouachita Mountains. Pine Bluff has the unique distinction of having the largest archery factory in the country.

Hernando de Soto was probably the first white man to see this state in 1541.

## CALIFORNIA

**Capital:** Sacramento.  
**Governor:** Goodwin J. Knight (Rep., 1955).  
**Entered Union & (rank):** Sept. 9, 1850 (31).  
**Present constitution adopted:** 1879.  
**Motto:** *Eureka* (I have found it).  
**State flower:** Golden poppy (1903).  
**State tree:** California redwood (1937).  
**State bird:** California valley quail (1931).  
**State animal:** Grizzly bear (unofficial).  
**State fish:** California golden trout (1947).  
**State insect:** California dog-face butterfly (unofficial).  
**State colors:** Blue and gold (unofficial).  
**State song:** "I Love You, California" (1951).  
**Nickname:** Golden State.  
**Origin of name:** From a book by the Spaniard Ordoñez de Montalvo.  
**1940 population & (rank):** 6,907,387 (5).  
**1950 population & (rank):** 10,586,223 (2).  
**1954 estimated population:** 12,450,000.

**Area & (rank):** 158,693 sq. mi. (2).  
**Geographic center:** In Madera Co., 35 mi. NE of Madera.  
**Number of counties:** 58.  
**Largest cities:** Los Angeles (2,104,663); San Francisco (798,000); Oakland (397,000); San Diego (434,924); Long Beach (262,000).  
**State forests:** 8 (70,235 ac.).  
**State parks and beaches:** 137 (559,888 ac.).  
**State general revenue (1952):** \$1,396,822,000.  
**State general expenditure (1952):** \$1,415,226,000.

California, celebrated for cinema and sunshine, is one of the nation's economic giants. It collects more money from raising food and catching fish than any other state and it stands high in oil production, lumbering and manufacturing. Out-of-state tourist visitors and the travel and recreation expenditures of the state's residents continue to play an important part in the expansion of trade and employment opportunities. Irrigation, in which California leads the country, makes possible the production of more than 200 commercial crops, with cotton, grapes, hay, oranges, barley, lettuce, tomatoes, potatoes and peaches topping the list. The state also leads in making wines and brandies.

Nature is spectacular. Death Valley, in the southeast, is 282 feet below sea level, the lowest spot in the nation; Mt. Whitney, a 14,496-foot peak, is the highest point in the U. S.; Lassen Peak is the only active U. S. volcano although its last eruptions were recorded in the years from 1914 to 1917; and the General Sherman Tree in Sequoia National Park is estimated to be about 3,500 years old. San Pedro is the world's largest man-made harbor, and the Bank of America National Trust and Savings Association, operated and owned by the Ginn family, is the largest private bank.

Gold, which was responsible for the state's settlement boom, is still found here, but the state's most important mineral products today are oil, natural gas and natural gas liquids, cement, sand and gravel, boron minerals, miscellaneous stones, tungsten, iron ore, diatomite, gypsum, salt and gold.

California is a leader in industrial energy and its cities specialize in airplane making, shipbuilding, furniture manufacturing and machinery production.

California's four national parks are great tourist attractions and the San Francisco-Oakland and Golden Gate Bridges are among the world's engineering marvels.

Because written Chinese contains no alphabet, the telephone operators in Chinatown of San Francisco are unique: they have to memorize the names, addresses and telephone numbers of subscribers.

Juan Rodriguez Cabrillo, Spanish explorer, was probably the first white man to see the state in 1542.

## COLORADO

**Capital:** Denver.  
**Governor:** Dan Thornton (Rep., 1955).  
**Organized as territory:** Feb. 28, 1861.  
**Entered Union & (rank):** Aug. 1, 1876 (38).  
**Present constitution adopted:** 1876.  
**Motto:** *Nil sine Numine* (Nothing without Providence).



State flower: Rocky Mountain columbine (1899).

State tree: Colorado blue spruce (1939).

State bird: Lark bunting (1931).

State colors: Blue and white (1911).

State song: "Where the Columbines Grow" (1915).

Nickname: Centennial State.

Origin of name: From the Spanish, meaning "red."

1940 population & (rank): 1,123,296 (33).

1950 population & (rank): 1,325,089 (34).

1953 estimated population: 1,413,000.

Area & (rank): 104,247 sq. mi. (7).

Geographic center: In Park Co., 30 mi. NW of Pikes Peak.

Number of counties: 63.

Largest cities: Denver (415,786); Pueblo (63,685); Colorado Springs (45,472); Greeley (20,354); Boulder (19,999).

State forests: 1 (70,980 ac.).

State parks: None.

Total state revenue (1953): \$202,538,521.

Total state expenditure (1953): \$204,454,508.

Colorado, the most elevated state in the nation, with 52 of its peaks over 14,000 feet in height and more than 1,000 going beyond the 10,000-foot mark, began as a miner of gold but has been predominantly agricultural in recent times. Livestock, wheat, hay, beans, sugar beets, corn, potatoes, barley and truck vegetables head the crop list. Like California and Arkansas, the state has a highly developed irrigation system to counteract its dry climate and promote farming.

Colorado is one of the nation's largest producers of uranium and vanadium; also mined are gold, silver, lead, zinc, copper, molybdenum, coal and several nonmetals. The state is also a leading oil producer.

Pueblo, the "Pittsburgh of the West," makes iron, steel, brick, tile and foundry products. Colorado Springs is perhaps the most popular tourist center in the Rocky Mountain sector. Mount Evans Highway is the highest auto road in the world. The world's highest suspension bridge stretches 1,053 feet over the Royal Gorge of the Arkansas River. Summit Lake, 12,740 feet high, near the top of Mt. Evans, is the highest lake in the U. S. reached by an auto road.

Of archeological interest are the cliff dwellings in the southwestern part of the state dating back to the 1st century A.D.

Coronado entered the state in 1540.

## CONNECTICUT

Capital: Hartford.

Governor: John Lodge (Rep., 1955).

Entered Union & (rank): Jan. 9, 1788 (5).

Present constitution adopted: 1818; revised effective 1955.

Motto: *Qui transtulit sustinet* (He who transplanted still sustains).

State flower: Mountain laurel (1907).

State tree: White oak (1947).

State bird: American robin (1943).

State song: None.

Nicknames: Constitution State; Nutmeg State; Land of Steady Habits.

Origin of name: From an Indian word meaning "beside the long tidal river."

1940 population & (rank): 1,709,242 (31).

1950 population & (rank): 2,007,280 (28).

1953 estimated population: 2,162,000.

Area & (rank): 5,009 sq. mi. (46).

Geographic center: In Hartford Co., at East Berlin.

Number of counties: 8.

Largest cities: Hartford (177,397); New Haven (164,443); Bridgeport (158,709); Waterbury (104,477); Stamford (74,293).

State forests: 26.

State parks: 66.

State general revenue (1953): \$221,426,092.

State general expenditure (1953): \$196,764,603.

Connecticut earned its sobriquet, the "Arsenal of the Nation," by its ability to turn out firearms and ammunition in early days, and from this developed an ability to turn out precision instruments of all classes.

Connecticut's cities produce a variety of products, some of which are: arms, sewing machines, airplanes, typewriters, motors, hardware, cutlery, tools, clocks, locks, pottery, machinery, brass products and hats. Hartford, which has the oldest U. S. newspaper, the *Courant*, established in 1764, is the insurance capital of the nation.

Connecticut devotes its farmland mainly to dairying, fruit growing and poultry raising. It stands high in tobacco growing and no crop in the nation receives as high a price per acre as her shade-grown tobacco.

The state is a popular resort area both for its beaches on Long Island Sound and for its inland lakes and forested hills. The southwest part of the state is a suburban area of New York City.

Connecticut was the first state to have a written constitution, the *Fundamental Orders*, adopted by three original towns of Colonial days in Jan., 1639.

A Dutch trader, Adrian Block, began the exploration of the state in 1614.

## DELAWARE

Capital: Dover.

Governor: J. Caleb Boggs (Rep., 1957).

Entered Union & (rank): Dec. 7, 1787 (1).

Present constitution adopted: 1897.

Motto: Liberty and independence.

State flower: Peach blossom.

State bird: Blue hen chicken.

State song: "Our Delaware."

Nicknames: Diamond State; Blue Hen State; First State.

Origin of name: In honor of Sir Thomas West, Lord De La Warr.

1940 population & (rank): 266,505 (46).

1950 population & (rank): 318,085 (46).

1953 estimated population: 358,000.

Area & (rank): 2,057 sq. mi. (47).

Geographic center: In Kent Co., 11 mi. S of Dover.

Number of counties: 3.

Largest cities: Wilmington (110,356); Newark (6,731); Dover (6,223); New Castle (5,396); Elsmere (5,314).

State forests: 5 (4,200 ac.).

State parks: 3.

State general revenue (1953): \$26,499,109.

State general expenditure (1953): \$33,139,388.

Little Delaware, at the lowest mean elevation of any state, grows a great variety of

small fruit and vegetables and is a U. S. pioneer in the industry of food canning. Peaches, strawberries, apples, corn, wheat, lima beans, asparagus, tomatoes and hay are the leading crops. Fishing in the bay is an important industry. Delaware's chicken farms are one of the great supply sources for the big markets of the East.

Manufactures in Delaware include chemicals, vulcanized fiber, glazed kid and morocco leathers, textiles, paper, metal products, machinery, machine tools and transportation equipment of every major type. In 1844, the *Bangor*, the first iron seagoing propeller-type vessel constructed in the U. S., was launched at Wilmington.

Delaware was the first state to ratify the U. S. Constitution, on Dec. 7, 1787. During the Civil War, although a slave state, Delaware refused to secede from the Union; the southern part of the state, however, supplied many supporters to the Confederacy.

Henry Hudson discovered Delaware Bay in his exploration of 1609. First settlers in the state were Dutchmen, who arrived in 1631, but who were shortly afterwards massacred by the Indians.

## DISTRICT OF COLUMBIA

(City of Washington)

Land ceded to Congress: 1788 by Maryland; 1789 by Virginia (retroceded to Virginia Sept. 7, 1846).

Seat of government transferred to D. C.: Dec. 1, 1800.

Created municipal corporation: Feb. 21, 1871. Present form of government established: June 11, 1878.

Board of Commissioners: Samuel Spencer (Pres.).

Motto: *Justitia omnibus* (Justice to all).

Official flower: American beauty rose.

Origin of name: In honor of Columbus.

1940 population & (rank as city): 663,091 (11).

1950 population & (rank as city): 802,178 (9).

1953 estimated population: 841,000.

Area: Land, 61.4 sq. mi.; inland water, 7.8.

Geographic center: Near corner of Fourth and L Sts., NW.

Altitude: Highest, 420 ft.; lowest, sea level.

Location: Between Virginia and Maryland, on Potomac River.

Churches: Protestant, 425; Roman Catholic, 36; Jewish, 12; others, 4.

City-owned parks: 730 (12,500 ac.).

Telephones: 709,847.

Radio sets: 374,204.

Television sets: 175,000.

Radio stations: AM, 13; FM, 7.

Television stations: 4.

Assessed valuation (1953): \$2,944,063,417.

City tax rate (1953): \$2.15 per \$100.

Bonded debt (1953): None.

Revenue (1953): \$152,814,850.

Expenditure (1953): \$147,005,128.

The District of Columbia—identical with the City of Washington—is the capital of the U. S. and the first carefully planned capital in the world.

D. C. history began in 1790 when Congress directed selection of a new capital site, 10 miles square, along the Potomac. When the

site was determined, it included thirty and three-quarters square miles on the Virginia side of the river. In 1846, however, Congress returned that area to Virginia.

President Washington had commissioned Major Pierre L'Enfant, a French engineer who had fought in the Revolution, to plan the new capital and in 1800 the government moved in. In 1814, during the War of 1812, a British force fired the capital and it was from the white paint applied to cover fire damage that the President's home came to be called the White House.

Washington's skyline is dominated by the Capitol and the Washington Monument, towering 555 feet. The Capitol, while not in the city center, is the key to the street address system. The city is laid out in rectangular blocks, created by streets intersecting at right angles. In addition, diagonal arteries fan out from various centers. Pennsylvania Avenue—the radial lines are generally named for the states—is the most famous of them, with the White House at number 1600.

The Capitol is 751 feet long and 350 feet wide. It has 431 rooms. The two wings, constructed of marble, house the Senate and the House; and the central part of the building contains the Rotunda, the Statuary Hall and the old Supreme Court chamber. Visitors may go through the building from 9 A.M. until 4:30 P.M. Congress normally convenes at noon, and the floor of the Senate and House must be cleared by 11:45 A.M. The galleries in the Senate and House chambers are open to visitors during sessions.

Washington has many other famous buildings and monuments—the Library of Congress, Jefferson Memorial, Lincoln Memorial, Grant Memorial, Tomb of the Unknown Soldier (Arlington Cemetery), Treasury Building, the Pentagon, Petersen House (where Lincoln died) and scores of others.

Washington is administered by three commissioners appointed by the President. Two of them must be residents of D. C. and the third must be a U. S. Army engineer appointed by the Chief of Engineers.

## FLORIDA

Capital: Tallahassee.

Governor: Charley E. Johns (acting).\*

Organized as territory: Mar. 30, 1822.

Entered Union & (rank): Mar. 3, 1845 (27).

Seceded from Union: Jan. 10, 1861.

Re-entered Union: June 25, 1868.

Present constitution adopted: 1885.

Motto: In God we trust.

State flower: Orange blossom (1909).

State bird: Mockingbird (1927).

State song: "Swanee River" (1935).

Nickname: Sunshine State.

Origin of name: From the Spanish, meaning "feast of flowers" (Easter).

1940 population & (rank): 1,897,414 (27).

1950 population & (rank): 2,771,305 (20).

1953 estimated population: 3,353,000.

Area & (rank): 58,666 sq. mi. (21).

Geographic center: In Citrus Co., 12 mi. W of N of Brooksville.

\*To Jan. 1955.

Number of counties: 67.

Largest cities: Miami (249,276); Jacksonville (204,517); Tampa (124,681); St. Petersburg (96,738); Orlando (52,367).

State forests: 4 (204,035 ac.).

State parks: 23 (74,936 ac.).

State general revenue (1953): \$278,479,314.

State general expenditure (1953): \$220,374,511.

Agriculture is Florida's biggest steady pursuit, but hotel statistics point to its chief fame—resort and tourist business. Along its coastline, the longest of any state, dozens of communities more than double in population during the winter season when northerners flee snow and cold.

Oranges and grapefruit lead Florida's crop list, then come tomatoes, tobacco, beans, celery, potatoes and peanuts. Truck gardening, commercial fishing and cattle are leading industries. Deep-sea fishing for sport is a leading tourist hobby.

Florida's low elevation is dotted by some 30,000 small lakes and the Everglades swamp in the south. Tampa is one of the largest cigar manufacturers and Jacksonville ships lumber and turpentine. St. Augustine, founded in 1565, is the oldest town of European origin in the U. S. Key West, exclusive resort city, is the southernmost city in the U. S. and is connected to the mainland by a unique causeway.

In 1513, Ponce de León, seeking the mythical "Fountain of Youth," was the first white man to see the state.

## GEORGIA

Capital: Atlanta.

Governor: Herman E. Talmadge (Dem., 1955).

Entered Union & (rank): Jan. 2, 1788 (4).

Seceded from Union: Jan. 19, 1861.

Re-entered Union: July 15, 1870.

Present constitution adopted: 1945.

Motto: Wisdom, justice and moderation.

State flower: Cherokee rose (1916).

State tree: Live oak (1937).

State bird: Brown thrasher (1935).

State song: "Georgia" (1922).

Nicknames: Peach State; Empire State of the South.

Origin of name: In honor of George II of England.

1940 population & (rank): 3,123,723 (14).

1950 population & (rank): 3,444,578 (13).

1953 estimated population: 3,585,000.

Area & (rank): 58,876 sq. mi. (20).

Geographic center: In Twiggs Co., 18 mi. SE of Macon.

Number of counties: 159.

Largest cities: Atlanta (331,314); Savannah (119,538); Columbus (79,611); Augusta (71,508); Macon (70,252).

State forests: 2 (2,000 ac.).

State parks: 25 (32,222 ac.).

State general revenue (1951): \$228,876,399.59.

State general allocations (1951): \$217,110,506.78.

Georgia is typical of the changing South. The value of its factory products has passed the value of its farm products, and industrialization is ever increasing. Atlanta is achieving importance as an industrial center. Cotton and lumber products, fer-

tilizer, processed food and a great variety of other items are among the factory output of Macon, Augusta, Savannah and Columbus. Because of its numerous textile mills, Columbus is called the "Lowell of the South."

Georgia ranks high in cotton, tobacco, peanuts and pecans. Georgia's peaches are nationally famous. From its vast stands of pine come more than half of all U. S. resin and turpentine. The state is one of the leaders in the value of its clay products. Cattle grazing is extensive. Georgia marble is widely used.

Warm Springs has the celebrated foundation operated to aid infantile paralysis victims. It was there that President Franklin D. Roosevelt died on April 12, 1945.

Hernando de Soto, a Spaniard, in 1540, looked over the red clay of Georgia, and General James Oglethorpe founded its first British colony Feb. 12, 1733, at Savannah.

## IDAHO

Capital: Boise.

Governor: Len B. Jordan (Rep., 1955).

Organized as territory: Mar. 3, 1863.

Entered Union & (rank): July 3, 1890 (43).

Present constitution adopted: 1890.

Motto: *Esto perpetua* (It is perpetuated).

State flower: Syringa (1931).

State tree: White pine (1935).

State bird: Mountain bluebird (1931).

State song: "Here We Have Idaho."

Nicknames: Gem State; Gem of the mountains.

Origin of name: From a Shoshoni Indian word meaning "sunup."

1940 population & (rank): 524,873 (42).

1950 population & (rank): 588,637 (43).

1953 estimated population: 603,000.

Area & (rank): 83,557 sq. mi. (12).

Geographic center: In Custer Co., 24 mi. S of W of Challis.

Number of counties: 44, plus small part of Yellowstone Park.

Largest cities: Boise (34,393); Pocatello (26,131); Idaho Falls (19,218); Twin Falls (17,600); Nampa (16,185); Lewiston (12,985).

State forests: 925,000 ac.

State parks: 4 (9,000 ac.).

State revenue (1952): general fund, \$21,928,219.92; special funds, \$67,634,499.06.

State expenditure (1952): general fund, \$19,449,181.12; special funds, \$66,491,880.24.

Idaho's huge investment in irrigation has advanced its agriculture well ahead of its mining. Idaho potatoes are eaten everywhere. The state grows apples and other fruits and wheat, corn and barley. There is light diversified manufacturing and Pocatello sells its cheese to a world market.

Idaho mines gold, silver, lead, zinc, copper and tungsten, and still has vast undeveloped mineral wealth. In its rugged central mountains is an area that is reachable only by pack horse. The forests of the state, covering at least one-third of the area, account for the fact that lumbering is extensive.

Tourist trade is important. Hunting and fishing are excellent. Sun Valley is a famed resort and attracts countless tourists to its swimming and skiing facilities.



Lewis and Clark visited Idaho in 1805 but real settlement began with the gold strike of 1860.

## ILLINOIS

**Capital:** Springfield.  
**Governor:** William G. Stratton (Rep., 1957).  
**Organized as territory:** Feb. 3, 1809.  
**Entered Union & (rank):** Dec. 3, 1818 (21).  
**Present constitution adopted:** 1870.  
**Motto:** State sovereignty, national union.  
**State flower:** Violet (1908).  
**State tree:** Oak (1908).  
**State bird:** Cardinal (1929).  
**State song:** "Illinois" (1925).  
**Nickname:** Prairie State.  
**Origin of name:** From an Indian word and French suffix meaning "tribe of superior men."  
**1940 population & (rank):** 7,897,241 (3).  
**1950 population & (rank):** 8,712,176 (4).  
**1953 estimated population:** 9,003,000.  
**Area & (rank):** 56,400 sq. mi. (23).  
**Geographic center:** In Logan Co., 28 mi. NE of Springfield.  
**Number of counties:** 102.  
**Largest cities (1950 Census):** Chicago (3,620,-962); Peoria (111,856); Rockford (92,927); East St. Louis (82,295); Springfield (81,628).  
**State forests:** 3 (10,278 ac.).  
**State parks, memorials, conservation areas:** 63 (28,000 ac.).  
**State general revenue (1953):** \$655,771,000.  
**State general expenditure (1953):** \$626,646,000.

Illinois anchors the Midwest like a rich giant, versatile in every big wealth-making industry. It stands high in manufacturing, coal mining, farm cash income, oil production. The sprawling Chicago district (including a slice of Indiana) is a great iron and steel producer, meat packer, grain exchange and rail center. Chicago is also a busy long-flight airport city and Great Lakes port area. The Illinois sand and gravel business is exceeded only by that of California.

In agriculture, Illinois is first in soy beans and high in corn, oats, wheat, barley, rye, potatoes and truck vegetables. Hog raising and dairying are important industries.

Illinois manufactures almost everything. Railroad cars, clothing, furniture, tractors, liquor, watches and farm implements are some of the items made in its several cities. An important U. S. arsenal is located on a Mississippi island off Rock Island.

Central Illinois is noted for shrines and memorials associated with the life and works of Abraham Lincoln, greatest son of Illinois. In Springfield are the Lincoln Home and Lincoln Tomb. At New Salem State Park, 20 miles northwest of Springfield, the reconstructed village of New Salem stands as a notable Lincoln memorial.

Marquette and Joliet, in 1673, were the first known explorers of this state.

## INDIANA

**Capital:** Indianapolis.  
**Governor:** George N. Craig (Rep., 1957).  
**Organized as territory:** May 7, 1800.  
**Entered Union & (rank):** Dec. 11, 1816 (19).  
**Present constitution adopted:** 1851.

**Motto:** The Crossroads of America.  
**State flower:** Zinnia (1931).  
**State tree:** Tulip tree (1931).  
**State bird:** Cardinal (1933).  
**State song:** "On the Banks of the Wabash, Far Away" (1913).  
**Nickname:** Hoosier State.  
**Origin of name:** Meaning "land of Indians."  
**1940 population & (rank):** 3,427,796 (12).  
**1950 population & (rank):** 3,934,224 (12).  
**1953 estimated population:** 4,136,000.  
**Area & (rank):** 36,291 sq. mi. (37).  
**Geographic center:** In Boone Co., 14 mi. W of N of Indianapolis.  
**Number of counties:** 92.  
**Largest cities (1950 Census):** Indianapolis (427,-173); Gary (133,911); Ft. Wayne (133,607); Evansville (128,636); South Bend (115,911).  
**State forests:** 14 (110,000 ac.).  
**State parks:** 18 (46,698 ac.).  
**State general revenue (1952-53):** \$325,264,000.  
**State general expenditure (1952-53):** \$305,037,000.

Indiana's fifty-one-mile Michigan waterfront is one of the great industrial centers of the world, turning out iron and steel and oil products to make this state a leader in manufacturing. Its cities have some of the world's largest industrial plants and their great output is further swelled by the inland factories. The list of products is endless—automobiles, farm implements, aviation and railroad equipment, sewing machines are made from iron ore mined in the Great Lakes region.

As a farmer the state stands high in soy beans, corn, tobacco, onions, wheat, oats, rye and tomatoes. The state produces most of U. S. peppermint and spearmint oil.

Indianapolis is the second largest U. S. city not on a navigable body of water. Wyandotte Cave, the second largest in the U. S., is located in Crawford County of Southern Indiana. West Baden and French Lick are well known for their mineral springs. Indiana was one of the early states to adopt the secret ballot based on the Australian system.

La Salle probably was the first white man to pass through the state in 1679.

## IOWA

**Capital:** Des Moines.  
**Governor:** William S. Beardsley (Rep., 1955).  
**Organized as territory:** June 12, 1838.  
**Entered Union & (rank):** Dec. 28, 1846 (29).  
**Present constitution adopted:** 1857.  
**Motto:** Our liberties we prize and our rights we will maintain.  
**State flower:** Wild rose (1897).  
**State bird:** Eastern goldfinch (1933).  
**State colors:** Red, white and blue (in state flag).  
**State song:** "Song of Iowa."  
**Nickname:** Hawkeye State.  
**Origin of name:** Probably from an Indian word meaning "this is the place."  
**1940 population & (rank):** 2,538,268 (20).  
**1950 population & (rank):** 2,621,073 (22).  
**1953 estimated population:** 2,605,000.  
**Area & (rank):** 56,280 sq. mi. (24).  
**Geographic center:** In Story Co., 5 mi. NE of Ames.  
**Number of counties:** 99.

**Largest cities:** Des Moines (177,965); Sioux City (83,991); Davenport (74,549); Cedar Rapids (72,296); Waterloo (65,198).  
**State forests:** 8 (13,392 ac.).  
**State parks:** 88 (27,901 ac.).  
**State general revenue (1951-52):** \$110,656,727.62.  
**State general expenditure (1952-53, estimated):** \$117,142,699.81.

Iowa stands in a class by itself as a producer of corn and hogs. The state's productivity often brings it the largest agricultural income in the nation. Ninety per cent of the state is under the plow and the fertility of its soil is unsurpassed anywhere. It also grows oats, soy beans, hemp, hay, popcorn, fruit, nuts and vegetables in great quantities.

Its top industrial activity is naturally centered in meat packing. Des Moines fittingly leads all cities in the publication of farm journals and is also a large insurance center. Muscatine is the largest U. S. maker of pearl buttons. Other Iowa factory products are farm implements, washing machines, fountain pens and railroad and auto equipment.

Iowa has always had a low illiteracy rate and in many years has had the lowest in the nation. The first President to be born west of the Mississippi was Herbert C. Hoover, who came from West Branch.

Marquette and Joliet first explored the state in 1673 and it was in 1778 that Julien Dubuque established the first white settlement on the site of the city that was later named in his honor.

## KANSAS

**Capital:** Topeka.  
**Governor:** Edward F. Arn (Rep., 1955).  
**Organized as territory:** May 30, 1854.  
**Entered Union & (rank):** Jan. 29, 1861 (34).  
**Present constitution adopted:** 1861.  
**Motto:** *Ad astra per aspera* (To the stars through difficulties).  
**State flower:** Sunflower (1903).  
**State tree:** Cottonwood (1937).  
**State bird:** Western meadow lark (1937).  
**State song:** "Home on the Range" (1947).  
**State march:** "The Kansas March" (1935).  
**Nicknames:** Sunflower State; Jayhawk State.  
**Origin of name:** From a Sioux word meaning "people of the south wind."  
**1940 population & (rank):** 1,801,028 (29).  
**1950 population & (rank):** 1,905,299 (31).  
**1953 estimated population:** 2,006,000.  
**Area & (rank):** 82,276 sq. mi. (13).  
**Geographic center:** In Barton Co., 15 mi. NE of Great Bend.  
**Number of counties:** 105.  
**Largest cities:** Wichita (168,279); Kansas City (129,553); Topeka (78,791); Hutchinson (33,775); Salina (26,176).  
**State forests:** 1 (4,000 ac.).  
**State parks:** 22 (14,394 ac.).  
**State general revenue (1950):** \$171,418,000.  
**State general expenditure (1950):** \$160,012,000.

Kansas finds its strength in wheat growing and flour milling. Slaughtering and meat packing are also extensively pursued. In the western part of the state, where Dodge City recalls the old days of cattle rustling,

rich prairie land sprawls over a large area and gives an abundance of winter wheat and fine grazing.

Corn, sorghums, oats, barley, soy beans and potatoes are other crops. Besides oil, Kansas mines zinc, coal, salt and lead.

The state is the geographical center of the U. S., and the geodetic center of the North American continent, and as such is the area from which official longitudes and latitudes are measured.

Wichita, a growing industrial center, is a leader in the production of military and civilian aircraft. Kansas City is a transportation, milling, and meat-packing center.

Dry since the Murray Liquor Law of 1881, Kansas repealed prohibition in March, 1949.

Coronado entered the state in 1541 in his quest for the fabled cities of gold. In pre-Civil War days, Kansas was the focal point of the nation as antislavery and proslavery factions fought for supremacy.

## KENTUCKY

**Capital:** Frankfort.  
**Governor:** Lawrence W. Wetherby (Dem., Dec. 1955).  
**Entered Union & (rank):** June 1, 1792 (15).  
**Present constitution adopted:** 1891.  
**Motto:** United we stand, divided we fall.  
**State flower:** Goldenrod.  
**State bird:** Kentucky cardinal.  
**State song:** "My Old Kentucky Home."  
**Nickname:** Blue Grass State.  
**Origin of name:** From an Iroquoian Indian word "Ken-tah-ten" meaning "land of tomorrow."  
**1940 population & (rank):** 2,845,627 (16).  
**1950 population & (rank):** 2,944,806 (19).  
**1953 estimated population:** 2,965,000.  
**Area & (rank):** 40,395 sq. mi. (36).  
**Geographic center:** In Marion Co., 3 mi. W of N of Lebanon.  
**Number of counties:** 120.  
**Largest cities:** Louisville (369,129); Covington (64,452); Lexington (55,534); Owensboro (33,651); Paducah (32,828).  
**State forests:** 3 (30,022 ac.).  
**State parks:** 24 (13,500 ac.).  
**Total state revenue (1952-53):** \$201,059,851.  
**Total state expenditures (1952-53):** \$208,089,638.

Kentucky prides itself on producing some of the nation's best tobacco, horses and whisky. It stands high in the production of native asphalt, hemp, coal, corn, oil.

Among the manufactured items produced by its cities are furniture, aluminum ware, brooms, shoes, lumber products, machinery, textiles and iron and steel products. Besides coal and oil, important minerals are natural gas and quarry products.

Louisville, the largest city, famed for the Kentucky Derby at Churchill Downs, has a large municipal university, distills whisky and is a great cigarette maker. The Blue Grass country is the home of some of the world's finest race horses. Lexington, standing in the center of this country, is a leading tobacconist. Mammoth Cave, with its many miles of underground passages, is one tourist attraction. Another is Kentucky Lake,

184 miles wide, the largest man-made body of water in the world.

Kentucky was credited with a star in the Confederate flag because a secessionist group in the southwest part of the state set up a short-lived government and joined the Confederacy. The legitimate government, however, remained in the Union.

Marquette and Joliet in 1673 saw Kentucky when it was the "Dark and Bloody Ground," fiercely contested by Indian tribes. Daniel Boone explored the country in 1767.

## LOUISIANA

**Capital:** Baton Rouge.

**Governor:** Robert F. Kennon (Dem., 1956).

**Organized as territory:** Mar. 26, 1804.

**Entered Union & (rank):** Apr. 30, 1812 (18).

**Succeeded from Union:** Jan. 26, 1861.

**Re-entered Union:** May 26, 1865.

**Present constitution adopted:** 1921.

**Motto:** Union, justice and confidence.

**State flower:** Magnolia (1900).

**State bird:** Pelican (unofficial).

**State song:** "Song of Louisiana."

**Nicknames:** Pelican State; Creole State; Sugar State.

**Origin of name:** In honor of Louis XIV of France.

**1940 population & (rank):** 2,363,880 (21).

**1950 population & (rank):** 2,683,516 (21).

**1954 estimated population:** 2,870,800.

**Area & (rank):** 48,523 sq. mi. (30).

**Geographic center:** In Avoyelles Parish, 3 mi. SE of Marksville.

**Number of parishes (counties):** 64.

**Largest cities:** New Orleans (570,445); Shreveport (127,206); Baton Rouge (125,629); Lake Charles (41,272); Monroe (38,572).

**State forests:** 1 (80,000 ac.).

**State parks:** 12 (11,731 ac.).

**State general revenue (1952-53):** \$413,602,757.

**State general expenditure (1952-53):** \$384,896,280.

Semitropical Louisiana, with much of its land below sea level, is a natural leader in sugar cane, sweet potatoes and rice production. This state, which still calls its counties parishes after the Spanish religious divisions, is also the nation's leading fur trapper with a rich annual bag of mink, muskrat, opossum and raccoon pelts. Other products of importance are sulfur, oil, natural gas, salt, cotton and lumber.

New Orleans, home of the Mardi Gras, avoids flooding only by an expensive levee and spillway system and the world's largest concentration of drainage pumps. Her industry is making increased use of raw materials from South and Central America. The Vieux Carré, in this Old World city, called by many the "Little Paris" of the New World, has some of the celebrated restaurants of the nation.

No state has a greater variety or abundance of game birds than Louisiana. Its state-owned wildlife sanctuaries are among the largest in the world.

Hernando de Soto, in 1540, is considered the first white man to see the state, but claims are made for Narvaez, who is reputed to have seen the state in 1528.

## MAINE

**Capital:** Augusta.

**Governor:** Edmund S. Muskie (Dem., 1957).

**Entered Union & (rank):** Mar. 15, 1820 (23).

**Present constitution adopted:** 1820.

**Motto:** *Dirigo* (I guide).

**State flower:** White pine cone and tassel (1895).

**State tree:** Pine tree.

**State bird:** Chickadee (1927).

**State song:** "State of Maine Song" (1937).

**Nickname:** Pine Tree State.

**Origin of name:** From the French province of Maine.

**1940 population & (rank):** 847,226 (35).

**1950 population & (rank):** 913,774 (35).

**1953 estimated population:** 914,000.

**Area & (rank):** 33,215 sq. mi. (38).

**Geographic center:** In Piscataquis Co., 18 mi. N of Dover-Foxcroft.

**Number of counties:** 16.

**Largest cities:** Portland (77,634); Lewiston (40,974); Bangor (31,558); Auburn (23,134); South Portland (21,866).

**State forests:** 1 (21,000 ac.).

**State parks:** 6 (133,042 ac.).

**State general revenue (1953):** \$80,001,043.

**State general expenditure (1953):** \$78,531,246.

Maine, the largest potato grower in the nation, is supposed to be the political barometer of the nation because it holds its general election a little more than a month before the other states, a situation that has brought forth the popular expression, "As Maine goes, so goes the nation." But since the state is invariably Republican, the nation sometimes fails to follow it.

Maine has the largest forest area in the East, some 16,783,000 acres in timberland and, as a result, pulp, paper making and lumbering are leading industries. In addition to the potato crops, hay, oats, buckwheat and apples are grown. Manufacturing includes textiles, shoes and fruit canning. Much poultry is raised.

Acadia National Park, on Mount Desert Island, approximately 50 miles southeast of Bangor, offers one of the finest examples of mountain and ocean views on the Atlantic.

With 2,500 lakes, hundreds of streams and a bracing summer climate, Maine is famous as a resort state. Fishing is excellent and deer, bear and other game are plentiful. Its city of Eastport is the most easterly city in the U. S., and York was the first chartered city (in 1642) in the nation.

Samuel de Champlain looked over Maine's rugged area in 1504 but the Cabots probably saw it at least a century earlier.

## MARYLAND

**Capital:** Annapolis.

**Governor:** Theodore R. McKeldin (Rep., 1955).

**Entered Union & (rank):** Apr. 28, 1788 (7).

**Present constitution adopted:** 1867.

**Motto:** *Fatti maschii, parole femine* (Manly deeds, womanly words).

**State flower:** Black-eyed susan (1918).

**State tree:** White oak (1941).

**State bird:** Baltimore oriole (1882).

**State colors:** Black and gold (1904).



**State song:** "Maryland! My Maryland!" (1939).  
**Nicknames:** Free State; Old Line State.  
**Origin of name:** In honor of Henrietta Maria (Queen of Charles I of England).  
**1940 population & (rank):** 1,821,244 (28).  
**1950 population & (rank):** 2,343,001 (24).  
**1953 estimated population:** 2,541,000.  
**Area & (rank):** 10,577 sq. mi. (41).  
**Geographic center:** In Anne Arundel Co., 3 mi. E of Collington.  
**Number of counties:** 23, plus 1 independent city.  
**Largest cities:** Baltimore (949,708); Cumberland (37,679); Hagerstown (36,260); Frederick (18,142); Salisbury (15,141).  
**State forests:** 11 (120,947 ac.).  
**State parks:** 12 (7,800 ac.).  
**State general revenue (1953):** \$304,608,810.  
**State general expenditure (1953):** \$304,045,049.

Maryland, a leader in vegetable canning, is cut almost in two by the upthrust of Chesapeake Bay, and with its many streams in this area, it has probably the most river frontage of any of the states. The state is one of the largest chicken raisers in the East and the Chesapeake is the largest crabbing center in the world. In addition to all kinds of vegetables, the state also grows wheat, hay, corn, potatoes and barley. Coal, sand and gravel, cement and stone are the leading mineral products.

The manufacturing products of its cities range from airplanes, steel, clothing, chemicals to meat packing. Annapolis is the site of the U. S. Naval Academy. The State House, built in 1772, is the only one built in the Colonial period which is still in regular use by a state government. Baltimore, the largest city, is the site of the Johns Hopkins Hospital.

The Charter of Maryland was granted in 1632 to Lord Baltimore, who died before it had passed the Great Seal; and it was issued to his oldest son, Cecil. The first settlers landed at St. Marys in 1634.

## MASSACHUSETTS

**Capital:** Boston.  
**Governor:** Christian A. Herter (Rep., 1955).  
**Entered Union & (rank):** Feb. 6, 1788 (6).  
**Present constitution adopted:** 1780.  
**Motto:** *Ense petit placidam sub libertate quietem* (By the sword we seek peace, but peace only under liberty).  
**State flower:** Mayflower (1918).  
**State tree:** American elm (1941).  
**State bird:** Chickadee (1941).  
**State colors:** Blue and gold (in flag and shield).  
**State song:** None.  
**Nicknames:** Bay State; Old Colony State.  
**Origin of name:** From two Indian words meaning "great mountain place."  
**1940 population & (rank):** 4,316,721 (8).  
**1950 population & (rank):** 4,690,514 (9).  
**1953 estimated population:** 4,900,000.  
**Area & (rank):** 8,257 sq. mi. (44).  
**Geographic center:** In Worcester Co., in N part of city of Worcester.  
**Number of counties:** 14.  
**Largest cities:** Boston (801,444); Worcester (203,486); Springfield (162,399); Cambridge (120,740); Fall River (111,963).

**State forests:** 70 (170,000 ac.).  
**State parks:** 7 (4,792 ac.).  
**State general revenue (1951):** \$409,988,000.  
**State general expenditure (1951):** \$447,775,000.

Massachusetts is the leading shoe producer in the U. S., and has been one of the leaders in the making of textiles since the beginning of American history. The top-ranking industries are machinery (including electrical machinery), leather, apparel and fabricated metals. Logan International Airport at East Boston, the nearest point in the U. S. to Europe, ranks among the world's greatest aerodromes.

Agricultural products, ranked in order of importance, are poultry, dairy products, greenhouse and nursery products, truck crops, cranberries, tobacco, apples, potatoes and hay. Other crops produced are corn, tomatoes, lettuce, celery, strawberries, buckwheat and maple sugar.

The growth of factories brought to this state an influx of foreigners and today Boston has one of the largest Irish populations in the nation. Boston became prominent as the "Cradle of Liberty" in early days and it was here that Paul Revere rode from Christ Church on Copp's Hill and the Battle of Bunker Hill was fought.

Small glacial lakes are scattered throughout the state.

The Pilgrims landed at Plymouth Rock in 1620 as the first large group to settle here but legend has it that Eric the Red and his Norsemen saw the state in the year 1000.

## MICHIGAN

**Capital:** Lansing.  
**Governor:** G. Mennen Williams (Dem., 1955).  
**Organized as territory:** Jan. 11, 1805.  
**Entered Union & (rank):** Jan. 26, 1837 (26).  
**Present constitution adopted:** 1908.  
**Motto:** *Si quaeris peninsulam amoenam circumspice* (If you seek a pleasant peninsula, look around you).  
**State flower:** Apple blossom (1897).  
**State bird:** Robin (unofficial).  
**State animal:** Wolverine (unofficial).  
**State song:** "Michigan, My Michigan" (unofficial).  
**Nickname:** Wolverine State.  
**Origin of name:** From two Indian words meaning "great lake."  
**1940 population & (rank):** 5,256,106 (7).  
**1950 population & (rank):** 6,371,766 (7).  
**1953 estimated population:** 6,852,000.  
**Area & (rank):** 58,216 sq. mi. (22).  
**Geographic center:** In Wexford Co., 5 mi. W of N of Cadillac.  
**Number of counties:** 83.  
**Largest cities:** Detroit (1,849,568); Grand Rapids (176,515); Flint (163,143); Dearborn (94,994); Saginaw (92,918).  
**State forests:** 22 (3,736,500 ac.).  
**State parks:** 57 (166,453 ac.).  
**State general revenue (1953):** \$735,992,517.  
**State general expenditure (1953):** \$710,865,595.

On a map of Michigan, draw an eighty-five-mile circle around Detroit and it will contain the home plants of the companies that make nine out of ten American auto-

mobiles. This vast industry, which sprang up about fifty years ago from the carriage-building business, is not the only activity of this state. Airplanes, furniture (Grand Rapids is the furniture center of the U. S.), diesel engines, hoists, pumps, boilers are among its leading items of production. Most of the nation's refrigerators are made in Michigan. On its farms are grown dry beans, grapes, peaches, potatoes, sugar beets and other food crops.

Michigan is the only state that is split completely in two parts. The northern peninsula is mining and timber country. The southern part is agricultural and manufacturing country. Connecting Lakes Superior and Huron is the busiest canal in the world—the Sault Ste. Marie. Its 11,037 inland lakes and 2,242 miles of Great Lakes shoreline make Michigan a good vacation land.

Michigan has the greatest inland fisheries in the world and markets at least 20 species from carp, trout, perch, pike to lake herring. The artificial ski jump on Iron Mountain is probably the highest in the world.

Jacques Cartier, in 1535, was the first white man to see the state.

## MINNESOTA

Capital: St. Paul.

Governor: C. Elmer Anderson (Rep., 1955).

Organized as territory: Mar. 3, 1849.

Entered Union & (rank): May 11, 1858 (32).

Present constitution adopted: 1858.

Motto: *L'Etoile du Nord* (The North Star).

State flower: Moccasin flower (1902).

State tree: Norway pine.

State bird: None.

State song: "Hail Minnesota."

Nicknames: North Star State; Gopher State.

Origin of name: From a Dakota Indian word meaning "sky-tinted water."

1940 population & (rank): 2,792,300 (18).

1950 population & (rank): 2,982,483 (18).

1953 estimated population: 3,053,000.

Area & (rank): 80,009 sq. mi. (11).

Geographic center: In Crow Wing Co., 10 mi. SW of Brainerd.

Number of counties: 87.

Largest cities: Minneapolis (521,718); St. Paul (311,349); Duluth (104,511); Rochester (29,885); St. Cloud (28,410).

State forests: 32 (2,037,065 ac.).

State parks: 61 (84,350 ac.).

State general revenue (1953): \$336,329,000.

State general expenditure (1953): \$320,553,000.

A few square miles of Northern Minnesota, in the Mesabi, Cuyuna and Vermillion Ranges, produce most of the nation's iron ore, and provide the activity for the port of Duluth. Farm and factory are equally important in Minnesota. Its farms produce oats, butter, eggs, milk, corn, wheat, potatoes, etc. Its factory production follows the pattern of the Midwest. Machinery, furniture, foundry products, etc. are manufactured.

St. Paul, whose twin city of Minneapolis faces it on the other side of the Mississippi, is the nation's biggest publisher of calendars and law books. With over 11,000 lakes, the

state is famous for its fishing, and deer, bear and fur trapping. Lake Itasca is the source of the Mississippi.

This "Land of 10,000 Lakes" has many famous resort regions. Travel business for 1952 was estimated to exceed \$264 million.

In 1655, Radisson and Groseilliers, French traders from Canada, were the first white men to see the state.

## MISSISSIPPI

Capital: Jackson.

Governor: Hugh L. White (Dem., 1956).

Organized as territory: Apr. 7, 1798.

Entered Union & (rank): Dec. 10, 1817 (20).

Seceded from Union: Jan. 9, 1861.

Re-entered Union: Feb. 23, 1870.

Present constitution adopted: 1890.

Motto: *Virtute et armis* (By valor and arms).

State flower: Magnolia blossom (1900).

State tree: Magnolia (1938).

State bird: Mockingbird (1944).

State song: "Way Down South in Mississippi" (1948).

Nickname: Magnolia State.

Origin of name: From an Indian word meaning "great water."

1940 population & (rank): 2,183,796 (23).

1950 population & (rank): 2,178,914 (26).

1953 estimated population: 2,183,000.

Area & (rank): 47,716 sq. mi. (31).

Geographic center: In Leake Co., 9 mi. N of W of Carthage.

Number of counties: 82.

Largest cities: Jackson (98,271); Meridian (41,893); Biloxi (37,425); Greenville (29,936); Hattiesburg (29,474).

State forests: 1 (1,760 ac.).

State parks: 10 (10,972 ac.).

State general revenue (1950): \$132,573,383.20.

State general expenditure (1950): \$134,463,877.57.

Mississippi, the stronghold of the Old South, has until the past decade been one of the least industrialized states, with more than half its population making a living from the soil. A recent program of industrialization, however, has attracted numerous manufacturing concerns. Cotton, nevertheless, is still king. The world's largest cotton plantation of 35,000 acres is located at Scott. Other crops are corn, peanuts, oats, pecans, soybeans, rice, tung nuts, sugar cane and hay.

Mississippi's Central Hills have produced a serious soil-erosion problem due to the over-emphasis placed on cotton growing through the years. Introduction of livestock and dairying and the pasture improvement programs attendant to it have helped in recent years to remedy this situation.

Mississippi was first to ratify the 18th Amendment and is still one of the two states (the other, Oklahoma) that bans the sale of hard liquor. In 1950, it had the third largest Negro population in the U. S.

The state abounds in historical landmarks and is the home of the Vicksburg National Military Park commemorating Grant's victory on this site.

Hernando de Soto, in 1540, was the first white man to see the state.

## MISSOURI

**Capital:** Jefferson City.  
**Governor:** Phil M. Donnelly (Dem., 1957).  
**Organized as territory:** June 4, 1812.  
**Entered Union & (rank):** Aug. 10, 1821 (24).  
**Present constitution adopted:** 1945.  
**Motto:** *Salus populi suprema lex esto* (The welfare of the people shall be the supreme law).  
**State flower:** Hawthorn (1923).  
**State bird:** Bluebird (1927).  
**State colors:** Red, white and blue (1913).  
**State song:** "Missouri Waltz" (1949).  
**Nickname:** Show-me State.  
**Origin of name:** From an Indian word probably meaning "muddy water."  
**1940 population & (rank):** 3,784,664 (10).  
**1950 population & (rank):** 3,954,653 (11).  
**1953 estimated population:** 4,096,000.  
**Area & (rank):** 69,674 sq. mi. (18).  
**Geographic center:** In Miller Co., 20 mi. SW of Jefferson City.  
**Number of counties:** 114, plus 1 independent city.  
**Largest cities:** St. Louis (856,796); Kansas City (456,622); St. Joseph (78,588); Springfield (66,731); University City (39,892).  
**State forests:** 7 (150,000 ac.).  
**State parks:** 23 (58,090 ac.).  
**State general revenue (1950):** \$273,231,000.  
**State general expenditures (1950):** \$275,135,000.

Missouri, touching both South and North, ranks highest in mining lead, making corn-cob pipes and breeding mules. Sometimes called the "saddle horse capital of the world" because of its excellent breeds, this state also grows corn, wheat, oats, barley, potatoes, tobacco and cotton on its fertile table land climbing to the Ozark Mountains. This country of rugged, timbered hills and deep valleys, has more than 10,000 swift-flowing streams. It produces automobiles, shoes, drugs, chemicals, beer and street cars.

Eads Bridge, spanning the Mississippi River at St. Louis, probably handles more freight cars than any other bridge in the world. Bagnell Dam, across the Osage River in the Ozarks, completed in 1931, created one of the largest artificial lakes in the world, running for 129 miles and having a shoreline of approximately 1,300 miles.

The homes of two of Missouri's most publicized sons—Mark Twain and Jesse James—are tourist attractions.

Missouri, like Kentucky, had a star in the Confederate flag because a minority of the state legislature adopted an ordinance of secession. The Governor and pro-secession legislature, however, were ousted and the state remained in the Union. The French explorer, La Salle, entered Missouri in 1682.

## MONTANA

**Capital:** Helena.  
**Governor:** J. Hugo Aronson (Rep., 1957).  
**Organized as territory:** May 26, 1864.  
**Entered Union & (rank):** Nov. 8, 1889 (41).  
**Present constitution adopted:** 1889.  
**Motto:** *Oro y plata* (Gold and silver).  
**State flower:** Bitterroot (1895).  
**State tree:** Ponderosa pine (1949).

**State bird:** Western meadow lark (1931).  
**State song:** "Montana" (1945).  
**Nickname:** Treasure State.  
**Origin of name:** Chosen from Mexican dictionary by J. M. Ashley. It is a Mexicanized Spanish word.  
**1940 population & (rank):** 559,456 (39).  
**1950 population & (rank):** 591,024 (42).  
**1953 estimated population:** 614,000.  
**Area & (rank):** 147,138 (3).  
**Geographic center:** In Fergus Co., 12 mi. W of Lewistown.  
**Number of counties:** 56, plus small part of Yellowstone National Park.  
**Largest cities:** Great Falls (39,214); Butte (33,251); Billings (31,834); Missoula (22,485); Helena (17,581).  
**State forests:** 7 (235,876 ac.).  
**State parks:** 4 (2,802 ac.).  
**State general revenue (1952):** \$109,801,415.94.  
**State general expenditure (1952):** \$81,388,066.11.

Montana's story is the old Western story—few settlers until a gold strike in 1858 brought an influx. Mining is its present occupation, and lead, zinc, silver, coal and oil are taken from its earth.

Butte, sitting on the "richest hill in the world," is the center of the area that once supplied half of the U. S. copper (its most important mineral). Livestock, wool, lumber and dude ranching round out its interests. Agriculture is dependent on irrigation.

The state as a whole still possesses the frank character of the old days, reflected in the legend that the only reason Helena was selected as the name to replace Last Chance Gulch was because of the suggestion of profanity in the front part of that name. Glacier National Park is a popular tourist area with its rugged scenery, hunting areas and dude ranches. While little development has as yet been made, Montana offers fine potentialities for winter sports. Snow conditions are good in the winter in the National Forest Service areas.

## NEBRASKA

**Capital:** Lincoln.  
**Governor:** Robert B. Crosby (Rep., 1955).  
**Organized as territory:** May 30, 1864.  
**Entered Union & (rank):** Mar. 1, 1867 (37).  
**Present constitution adopted:** 1875.  
**Motto:** Equality before the law.  
**State flower:** Goldenrod (1895).  
**State tree:** American elm (1937).  
**State bird:** Western meadow lark (1929).  
**State song:** "My Nebraska" (unofficial).  
**Nickname:** Cornhusker State.  
**Origin of name:** From an Oto Indian word meaning "flat water."  
**1940 population & (rank):** 1,315,834 (32).  
**1950 population & (rank):** 1,325,510 (33).  
**1953 estimated population:** 1,347,000.  
**Area & (rank):** 77,237 sq. mi. (14).  
**Geographic center:** In Custer Co., 10 mi. NW of Broken Bow.  
**Number of counties:** 93.  
**Largest cities:** Omaha (251,117); Lincoln (98,884); Grand Island (22,682); Hastings (20,211); North Platte (15,433).  
**State forests:** 2.  
**State parks:** 7 (1,036 ac.).



State general revenue (1950): \$87,098,000.

State general expenditure (1950): \$84,216,000.

Nebraska lives by its expansive sea of grain, reflected in its bumper crops of rye, corn and wheat. There are more varieties of grass growing in this state, valuable for forage, than in any other state in the nation. Its sizable cattle and hog industry help to make Omaha a great stockyard and meat-packing center. Flour, freight cars, farm machinery, precision instruments, brick and tile are products of Nebraska.

One of the world's largest creameries is at Lincoln. Oil was discovered in 1939 and natural gas was discovered in 1949. In 1937, after a constitutional amendment three years earlier, Nebraska became the only state in the union to have a unicameral legislature, to which members are elected without party designation.

## NEVADA

Capital: Carson City.

Governor: Charles H. Russell (Rep., 1955).

Organized as territory: Mar. 2, 1861.

Entered Union & (rank): Oct. 31, 1864 (36).

Present constitution adopted: 1864.

Motto: All for our country.

State flower: Sagebrush (1917).

State tree: Pinon pine.

State bird: Mountain bluebird (unofficial).

State colors: Blue and silver (unofficial).

State song: "Home Means Nevada" (1933).

Nicknames: Sagebrush State; Silver State.

Origin of name: Spanish: meaning "snow-clad."

1940 population & (rank): 110,247 (48).

1950 population & (rank): 160,083 (48).

1953 estimated population: 206,000.

Area & rank: 110,540 (6).

Geographic center: In Lander Co., 23 mi. SE of Austin.

Number of counties: 17.

Largest cities: Reno (32,497); Las Vegas (24,624); Sparks (8,203); Elko (5,393); North Las Vegas (3,875).

State forests: None.

State parks: 4 (1,600 ac.).

State general revenue (1951): \$18,558,745.

State general expenditure (1951): \$17,523,611.

Nevada, the smallest state in population, had in 1950 about one and one-half persons per square mile. It was made famous by the discovery of the fabulous Comstock Lode in 1859, and has since lived mainly on its mines which give up large quantities of gold, silver, copper, lead, zinc, quicksilver and tungsten. Oil was discovered for the first time in Feb., 1954. In 1931, the state created a new industry by writing an easy divorce law and Reno has since become the "divorce capital of the nation." Gambling was legalized and the gaming tables now pay a two-per cent tax to add to the state's income.

Near Las Vegas, on the Colorado River, stands the Hoover Dam which has twice changed its name (Hoover to Boulder to Hoover), the highest in the world at 726 feet. The state's agricultural crop consists mainly of hay, wheat, barley and potatoes. Carson City is the smallest state capital in population in the U. S. Nevada was the first state to use gas for capital punishment.

Francisco Garcés, a Franciscan friar, saw Nevada's rugged scenery in 1775.

## NEW HAMPSHIRE

Capital: Concord.

Governor: Hugh Gregg (Rep., 1955).

Entered Union & (rank): June 21, 1788 (9).

Present constitution adopted: 1784.

Motto: Live free or die.

State flower: Purple lilac (1919).

State tree: White birch (1947).

State bird: None.

State song: "Old New Hampshire" (1949).

Nickname: Granite State.

Origin of name: From the English county of Hampshire.

1940 population & (rank): 491,524 (45).

1950 population & (rank): 533,242 (44).

1953 estimated population: 527,000.

Area & (rank): 9,304 sq. mi. (43).

Geographic center: In Belknap Co., 3 mi. E of Ashland.

Number of counties: 10.

Largest cities: Manchester (82,732); Nashua (34,669); Concord (27,988); Portsmouth (18,830); Berlin (16,615).

State forests: 143 (55,769 ac.).

State parks: 33 (30,976 ac.).

State general revenue (1951): \$37,270,931.

State general expenditure (1951): \$39,374,070.

New Hampshire is the only state that ever played host at the formal conclusion of a foreign war when, in 1905, Portsmouth was the scene of the treaty ending the Russo-Japanese War. The sandy and stony loam of this state needs liberal fertilization for the growing of its principal crops—fruit, truck vegetables, corn, oats, hay and potatoes. Its chief manufacturing is the production of textiles, leather goods, pulp and paper products.

New Hampshire was the first state to declare its independence from Great Britain and to adopt a constitution. Mt. Washington has recorded some of the world's strongest wind velocities, the last recording of record proportions being registered at 231 miles per hour. The state also has the largest legislative body: it varies from 375 to 400.

With 1,300 lakes and good climate for both winter sports and summer vacations, the state is highly popular as a resort area.

Martin Pring, an Englishman, was probably the first white man to see the state in 1603.

## NEW JERSEY

Capital: Trenton.

Governor: Robert B. Meyner (Dem., 1958).

Entered Union & (rank): Dec. 18, 1787 (3).

Present constitution adopted: 1947.

Motto: Liberty and prosperity.

State flower: Purple violet (1913).

State bird: Eastern goldfinch (1935).

State tree: Red oak (1950).

State colors: Blue and gold.

State song: None.

Nickname: Garden State.

Origin of name: From the Channel island of Jersey.

1940 population & (rank): 4,160,165 (9).

1950 population & (rank): 4,835,329 (8).

1953 estimated population: 5,141,000.

Area & (rank): 7,836 sq. mi. (45).

**Geographic center:** In Mercer Co., 5 mi. SE of the State capitol.

**Number of counties:** 21.

**Largest cities:** Newark (438,776); Jersey City (293,017); Paterson (139,336); Trenton (128,009); Camden (124,555).

**State forests:** 10 (60,327 ac.).

**State parks:** 22 (20,000 ac.).

**State general revenue (1952-53):** \$407,594,172.

**State general expenditure (1952-53):** \$340,882,500.

New Jersey, situated in an area of wide industrial diversification between the major markets of Philadelphia and New York, is known as the crossroads of the East. Products from over 12,000 factories and shops can be delivered overnight to about 49 million people, representing 12 states and the District of Columbia. The greatest single industry is chemicals, and New Jersey is one of the foremost research centers of the world. The state ranks seventh in value of goods added by manufacture.

Nearly 36% of the land area is devoted to agriculture. It rates high in practically all garden vegetables. Among its fruit crops are the famous cultivated blueberries, which originated in New Jersey. The poultry industry is one of the principal phases of the state's agriculture, and dairying occupies a prominent place. The farm value of New Jersey agricultural products in 1953 amounted to \$404,187,000.

The oldest U. S. highway of any length was built in Sussex and Warren counties in 1650. Sandy Hook Lighthouse, built in 1764, is the oldest in point of service in the Western Hemisphere. Near Morristown is the Seeing Eye Training School, where dogs are trained to lead the blind.

Its fortunate topography and geographic location make New Jersey a popular resort state. Wooded hills in the north and over 55 beaches on its 120 mile seashore, from Sandy Hook to Cape May, are favorite tourist attractions. There are over 1,400 miles of trout streams. Lakes and ponds total over 800. New Jersey's travel-industry income is over \$1½ billion. The first recognized baseball game was played in Hudson County. Cabot, Verranzo and Gomez were early explorers of New Jersey shores. Henry Hudson sailed into Newark Bay in 1609.

## NEW MEXICO

**Capital:** Santa Fe.

**Governor:** Edwin L. Mechem (Rep., 1955).

**Organized as territory:** Sept. 9, 1850.

**Entered Union & (rank):** Jan. 6, 1912 (47).

**Present constitution adopted:** 1912.

**Motto:** *Crescit eundo* (It grows as it goes).

**State flower:** Yucca (1927).

**State tree:** Piñon (1949).

**State bird:** Road runner (1949).

**State colors:** Flaming red and golden orange (1915).

**State song:** "O, Fair New Mexico" (1916).

**Nicknames:** Land of Enchantment; Sunshine State.

**Origin of name:** From the country of Mexico.

**1940 population & (rank):** 531,818 (42).

**1950 population & (rank):** 681,187 (39).

**1953 estimated population:** 758,000.

**Area & (rank):** 121,666 sq. mi. (4).

**Geographic center:** In Torrance Co., 12 mi. W of S of Willard.

**Number of counties:** 32.

**Largest cities:** Albuquerque (96,815); Santa Fe (27,998); Roswell (25,738); Carlsbad (17,975); Clovis (17,318).

**State forests:** None.

**State parks:** 6 (16,018 ac.).

**State general revenue (1952):** \$112,343,000.

**State general expenditure (1952):** \$106,450,000.

Bilingual New Mexico is the only state where both English and Spanish are accepted as official languages. The two cultures of this state give it a picturesqueness that attracts many tourists. Mining and the raising of cattle and crops provide the state's chief interests. Irrigation is vital.

The state contains the largest Indian reservation in the U. S. with over 16,000,000 acres, inhabited by the Navajo tribe. The Apaches and Utes live in three other reservations in this state (the Jicarilla Apache, at Horse Lake; the Mescalero Apache, north-east of Alamogordo; the Navajo, in San Juan and McKinley counties; and the Southern Ute, in the northern part of San Juan County). Carlsbad Caverns, the largest in the world, attract many visitors annually. The highest golf course in the world, over 9,000 feet above sea level, is near Alamogordo.

The state's dry and healthful climate makes it a great recuperative mecca for tuberculars. Santa Fe, the oldest seat of government in the U. S., was founded by the Spaniards in 1609-10.

Los Alamos is the site of an atomic-bomb laboratory. The first atomic explosion in history was at the Alamogordo air base.

## NEW YORK

**Capital:** Albany.

**Governor:** Thomas E. Dewey (Rep., 1955).

**Entered Union & (rank):** July 26, 1788 (11).

**Present constitution adopted:** 1777 (last revised 1938).

**Motto:** *Excelsior* (Ever Upward).

**State flower:** Rose (unofficial).

**State tree:** Sugar maple (unofficial).

**State bird:** Bluebird (unofficial).

**State song:** None.

**Nickname:** Empire State.

**Origin of name:** In honor of the English Duke of York.

**1940 population & (rank):** 13,479,142 (1).

**1950 population & (rank):** 14,830,192 (1).

**1953 estimated population:** 15,233,000.

**Area & (rank):** 49,576 sq. mi. (29).

**Geographic center:** In Madison Co., 6 mi. E of S of Oneida.

**Number of counties:** 62.

**Largest cities:** New York (7,891,957); Buffalo (580,132); Rochester (332,488); Syracuse (220,583); Yonkers (152,798).

**State Forest Preserves:** Adirondacks, 2,184,067 ac.; Catskills, 234,516 ac.

**State parks:** 79 (189,347 ac.).

**State general revenue (1954):** \$1,090,500,000.

**State general expenditure (1954):** \$1,074,900,000.

New York, with the great metropolis of New York City, is the spectacular nerve center of the nation. It leads in population, manufacturing, foreign trade, commercial and financial transactions, book and maga-

zine publishing, theatrical production and a host of other fields.

New York City is not only a national but an international leader. It is the busiest seaport in the world; New York International Airport is the largest in the world. First in manufacturing since 1824, the city today has a gigantic clothing and fur industry and also makes chemicals, paints, drugs, machinery, paper, wood and textile products and houses the tallest buildings in the world. Nearly all the rest of the state's manufacturing is done along the Hudson River north to Albany and through the Mohawk Valley and Central New York to Buffalo. It includes planes, heavy and light electrical equipment, locomotives, radio and TV sets, auto bodies and parts, washing machines, typewriters, photographic and optical equipment, shirts and flour. Dairying, truck gardening, and the raising of potatoes, onions and cabbage keep the New York farmer prosperous. Wine-making is a major industry in the state.

New York's extremely rapid commercial growth may be partly attributed to Governor De Witt Clinton who pushed through the construction of the Erie Canal (Buffalo to Albany) which was formally opened in 1825. The canal was the first of the great man-made waterways of the U. S.

The state leads the nation and the world as a tourist attraction. The convention and tourist business is the state's fifth greatest source of income.

For a short time, New York City was the U. S. Capital and George Washington was inaugurated there as the first President on April 30, 1789. It is a key state in any national election, and so significant in the life of the country that any Governor is likely to become a presidential possibility.

Henry Hudson explored New York in 1609 in his trip up the river later named in his honor. On the basis of his explorations, the Dutch bought the island of Manhattan for \$24 from the Indians in 1626.

## NORTH CAROLINA

Capital: Raleigh.

Governor: William B. Umstead (Dem., 1957).

Entered Union & (rank): Nov. 21, 1789 (12).

Seceded from Union: May 20, 1861.

Re-entered Union: July 20, 1868.

Present constitution adopted: 1876.

Motto: *Esse quam videri* (To be rather than to seem).

State flower: Dogwood (1941).

State bird: Cardinal (1943).

State song: "The Old North State" (1927).

State colors: red and blue (1945).

Nickname: Tar Heel State.

Origin of name: In honor of Charles I of England.

1940 population & (rank): 3,571,623 (11).

1950 population & (rank): 4,061,929 (10).

1953 estimated population: 4,193,000.

Area & (rank): 52,712 sq. mi. (27).

Geographic center: In Chatham Co., 10 mi. NW of Sanford.

Number of counties: 100.

Largest cities (1950 Census): Charlotte (134,042); Winston-Salem (87,811); Greensboro (74,389); Durham (71,311); Raleigh (65,679).

State forests: 1.

State parks: 12 (17,568 ac.).

State revenue (all funds) (1953-54): \$302,572,-756.

State expenditure (all funds) (1953-54): \$305,-158,820.

North Carolina is the nation's largest tobacco and textile producer. It holds first place in the Southeast in population and in the value of its industrial and agricultural production. This production is highly diversified, with furniture, chemicals and paper constituting enormous industries. Tobacco, corn, cotton, hay, peanuts and truck and vegetable crops are of major importance.

The state leads the South in social and economic reforms. Its educational pay scale is the same for white and Negro teachers. Its school-bus system is the world's largest.

There are 21 state and national parks and forests, including the Great Smoky Mountains National Park, the Blue Ridge Parkway and the new Cape Hatteras National Seashore. Mt. Mitchell, on the Parkway near Asheville, is the highest mountain in the Eastern U. S. (6,684 ft. above sea level).

The largest military reservation in the U. S. (Fort Bragg) and the largest Marine amphibious training base (Camp LeJeune) are in North Carolina.

The first English colony in America was established on Roanoke Island in 1585. Virginia Dare, born there in 1587, was the first child of English parentage born in America.

## NORTH DAKOTA

Capital: Bismarck.

Governor: C. Norman Brunsdale (Rep., 1955).

Organized as territory: Mar. 2, 1861.

Entered Union & (rank): Nov. 2, 1889 (39).

Present constitution adopted: 1889.

Motto: Liberty and union, now and forever: one and inseparable.

State flower: Wild prairie rose (1907).

State tree: American elm (1947).

State bird: Western meadow lark (1947).

State song: "North Dakota Hymn" (1947).

Nickname: Flickertail State; Sioux State.

Origin of name: From the Dakotah tribe, meaning "allies."

1940 population & (rank): 641,935 (39).

1950 population & (rank): 619,636 (41).

1953 estimated population: 621,000.

Area & (rank): 70,665 sq. mi. (16).

Geographic center: In Sheridan Co., 5 mi. SW of McClusky.

Number of counties: 53.

Largest cities: Fargo (38,256); Grand Forks (26,836); Minot (22,032); Bismarck (18,640); Jamestown (10,697).

State forests: None.

State parks: 5 (2,981 ac.).

State collections (1952): \$77,797,996.

State disbursements (1952): \$71,797,379.

North Dakota, politically progressive, operates the only state-owned bank, flour mill and grain elevator in the nation. The state owes its main activity to agriculture with over 87 per cent of its acreage devoted to the growth of barley, wheat, rye, oats. Most of its manufacturing consists of dairy products.



The finest farming land is in the Red River Valley, celebrated in song. Cattle raising is centered in the Missouri Valley.

"Number One Northern Hard," a wheat first grown in this state, still brings premium prices for its excellence of quality.

The completion of Garrison Dam on the Missouri River will result in extensive irrigation and the production of 400,000 kw. of electricity for use in the Missouri Basin areas.

In 1951, oil was discovered near Tioga by the Amerada Petroleum Corp. Geologists believe that the state holds two-thirds of our lignite.

The geographic center of the North American continent is located in Pierce County, latitude 48°10'N, longitude 100°10'W.

A French trader in furs, Vendrye, entered the state from Canada in 1738.

## OHIO

**Capital:** Columbus.

**Governor:** Frank J. Lausche (Dem., 1955).

**Entered Union & (rank):** Mar. 1, 1803 (17).

**Present constitution adopted:** 1851.

**Motto:** *Imperium in imperio* (An empire within an empire) (unofficial).

**State flower:** Scarlet carnation (1904).

**State bird:** Cardinal (1933).

**State song:** None.

**Nickname:** Buckeye State.

**Origin of name:** From an Iroquoian word meaning "great river."

**1940 population & (rank):** 6,907,612 (4).

**1950 population & (rank):** 7,946,627 (5).

**1953 estimated population:** 8,369,000.

**Area & (rank):** 41,222 sq. mi. (34).

**Geographic center:** In Delaware Co., 25 mi. N of Columbus.

**Number of counties:** 88.

**Largest cities:** Cleveland (914,808); Cincinnati (503,998); Columbus (375,901); Toledo (303,616); Akron (274,605).

**State forests:** 20 (145,281 ac.).

**State parks:** 55 (22,074 ac.).

**State general revenue (1950):** \$662,862,301.

**State general expenditure (1950):** \$695,534,112.

With vast coal and oil fields on the one hand, with Great Lakes iron ore close by on the other, Ohio automatically developed into one of the nation's greatest industrial states. The vast and varied factory output of its cities runs from wire, nails, nuts, bolts, paper, radios, cash registers, golf clubs, refrigerators to motors of all kinds and sizes. Cleveland is one of the world's largest handlers of iron ore. Toledo is the nation's largest shipper of coal. Akron makes most of the automobile tires that are used in the United States.

Ohio's thousands of factories almost overshadow its importance in two other basic industries—mining and agriculture. Its fertile soil produces soy beans, corn, wheat, grapes and tobacco. Dairying and greenhouse products are important. Mining is centered in coal, oil, sand, gravel and clay.

Ohio has sent to the White House eight men, six of whom were elected from that state and two of whom were born in Ohio but elected from other states.

In 1749, Céleron, a French officer, reached the Ohio River from Canada and claimed the area for the French, disregarding the grants of the British Kings.

## OKLAHOMA

**Capital:** Oklahoma City.

**Governor:** Johnston Murray (Dem., 1955).

**Organized as territory:** May 2, 1890.

**Entered Union & (rank):** Nov. 16, 1907 (46).

**Present constitution adopted:** 1907.

**Motto:** *Labor omnia vincit* (Labor conquers all things).

**State flower:** Mistletoe (1893).

**State tree:** Redbud (1937).

**State bird:** Scissor-tailed Flycatcher (1951).

**State colors:** Green and white (1915).

**State song:** "Oklahoma" (Rodgers-Hammerstein) (1953).

**Nickname:** Sooner State.

**Origin of name:** From two Choctaw Indian words meaning "red people."

**1940 population & (rank):** 2,336,434 (22).

**1950 population & (rank):** 2,233,351 (25).

**1953 estimated population:** 2,251,000.

**Area & (rank):** 69,919 sq. mi. (17).

**Geographic center:** In Oklahoma Co., 8 mi. N of Oklahoma City.

**Number of counties:** 77.

**Largest cities:** Oklahoma City (243,504); Tulsa (182,740); Muskogee (37,289); Enid (36,017); Lawton (34,757).

**State forests:** None.

**State parks:** 10 (55,047 ac.).

**State general revenue (1952):** \$272,796,999.

**State general expenditure (1952):** \$289,316,999.

Oil has made Oklahoma a rich state and Tulsa one of the world's wealthiest cities per capita. The smelting of zinc, oil refining, meat packing and flour milling are its chief factory industries. Wheat, corn, oats, cotton, sorghums and potatoes are its agricultural crops of chief importance.

In 1834, Oklahoma was set aside as Indian Territory. It remained so until Apr. 22, 1889, when the first opening to homestead settlement occurred. On that one day, 50,000 people swarmed in, and the term "sooners" was born to apply to those who had sneaked into the state sooner than the noon deadline. A series of land openings by "runs" and lotteries extended through 1901, and sales by sealed bid of remaining lands were held in 1906 and 1910.

Oklahoma has about one-third of the total Indian population of the U. S.—110,864, according to a 1945 report of the Bureau of Indian Affairs. This figure included only adults of one-half or more Indian blood.

The state is one of the two in the nation (the other is Mississippi) which prohibits the sale of hard liquor.

Coronado entered Oklahoma in 1541 while searching for the mythical city of Quivira.

## OREGON

**Capital:** Salem.

**Governor:** Paul L. Patterson (Rep., 1955).

**Organized as territory:** Aug. 13, 1848.

**Entered Union & (rank):** Feb. 14, 1859 (33).

**Present constitution adopted:** 1859.

**Motto:** The Union (unofficial).  
**State flower:** Oregon grape (1899).  
**State tree:** Douglas fir (1939).  
**State bird:** Western meadow lark (1927).  
**State song:** "Oregon, My Oregon" (1927).  
**Nickname:** Beaver State.  
**Origin of name:** Unknown. However, it is generally accepted that the name, first used by Jonathan Carver in 1778, was taken from the writings of Maj. Robert Rogers, an English army officer.  
**1940 population & (rank):** 1,089,684 (34).  
**1950 population & (rank):** 1,521,341 (32).  
**1953 estimated population:** 1,602,000.  
**Area & (rank):** 96,981 sq. mi. (9).  
**Geographic center:** In Crook Co., 25 mi. E of S of Prineville.  
**Number of counties:** 36.  
**Largest cities:** Portland (373,628); Salem (43,140); Eugene (35,879); Medford (17,305); Corvallis (16,207).  
**State forests:** 720,000 ac. in 14 counties.  
**State Parks:** 156 (54,934 ac.).  
**State general revenue (1953):** \$186,354,000.  
**State general expenditure (1953):** \$233,456,000.

Oregon, with the greatest U. S. reserve of standing timber, has a billion dollar forestry industry. Its salmon fishing industry, centered at Astoria at the mouth of the Columbia River, is one of the world's largest.

In agriculture, the state leads in growing peppermint, holly, lily bulbs, caneberries, filberts, Blue Lake beans and cover seed crops, and also raises strawberries, hops, wheat and other grains, sugar beets, potatoes, green peas, fiber flax, dairy products, livestock and poultry.

Oregon's coast is lush and green with heavy rainfall and is noted for its scenic beauty. Crater Lake National Park, Mount Hood and Bonneville Dam on the Columbia are other tourist attractions.

With the low-cost electric power provided by Bonneville Dam and other hydroelectric dams in the Pacific Northwest, Oregon has developed steadily as a manufacturing state. Leading manufactures are lumber and lumber products, metalwork, machinery, aluminum, chemicals and paper.

## PENNSYLVANIA

**Capital:** Harrisburg.  
**Governor:** John S. Fine (Rep., 1955).  
**Entered Union & (rank):** Dec. 12, 1787 (2).  
**Present constitution adopted:** 1874.  
**Motto:** Virtue, liberty and independence.  
**State flower:** Mountain laurel (1933).  
**State tree:** Hemlock (1931).  
**State bird:** Ruffed grouse (1931).  
**State colors:** Blue and gold.  
**State song:** None.  
**Nickname:** Keystone State.  
**Origin of name:** In honor of Adm. Sir William Penn, father of William Penn. It means "Penn's Woodland."  
**1940 population & (rank):** 9,900,180 (2).  
**1950 population & (rank):** 10,498,012 (3).  
**1953 estimated population:** 10,656,000.  
**Area & (rank):** 45,333 sq. mi. (32).  
**Geographic center:** In Center Co., 2 1/2 mi. SW of Bellefonte.

**Number of counties:** 67.

**Largest cities:** Philadelphia (2,071,605); Pittsburgh (676,806); Erie (130,803); Scranton (125,536); Reading (109,320).  
**State forests:** 23 (1,798,883 ac.).  
**State parks:** 109 (103,987 ac.).  
**State revenue (1953):** \$1,122,039,000.  
**State expenditure (1953):** \$1,088,735,000.

From the steel mills of Pittsburgh through the mid-state coal mines and oil wells to the shipyards and factories of Philadelphia, Pennsylvania bristles with heavy industry. Iron and steel are the state's trademarks. Today about half of U. S. iron and steel is made in the Pittsburgh area. Electrical machinery, textiles, boilers, engines, knit goods, locomotives, wire, trucks, buses, silk products, blast furnaces and other heavy products are made in the countless factories of this state. Philadelphia is the second busiest port in the U. S. and was the third largest city in population in 1950. Pennsylvania contains virtually all the U. S. anthracite (hard coal) deposits. As a farmer the state stands high in buckwheat, tobacco, apples, potatoes, corn, wheat, barley, hay and peaches.

Pennsylvania is rich in historical lore. Philadelphia was the seat of the federal government almost continuously from 1776 until 1800, and there the Declaration of Independence was signed and the Constitution drawn up. Valley Forge, of the Revolution, and Gettysburg, the turning-point of the Civil War, are both in Pennsylvania. The Liberty Bell stands in Independence Square in Philadelphia.

Henry Hudson sailed into Delaware Bay in 1609, following his trip up the Hudson River. In 1681, William Penn, the Quaker, founded its first colony.

## RHODE ISLAND

**Capital:** Providence.  
**Governor:** Dennis J. Roberts (Dem., 1955).  
**Entered Union & (rank):** May 29, 1790 (13).  
**Present constitution adopted:** 1843.  
**Motto:** Hope.  
**State flower:** Violet (unofficial).  
**State tree:** Maple (unofficial).  
**State bird:** Rhode Island Red (official).  
**State colors:** Blue, white and gold (in state flag).  
**Song:** "Rhode Island" (1946).  
**Nickname:** Little Rhody.  
**Origin of name:** From the Greek island of Rhodes.  
**1940 population & (rank):** 731,346 (36).  
**1950 population & (rank):** 791,896 (36).  
**1953 estimated population:** 817,000.  
**Area & (rank):** 1,214 sq. mi. (48).  
**Geographic center:** In Kent Co., 2.8 mi. S by W. of Crompton.  
**Number of counties:** 5.  
**Largest cities:** Providence (248,674); Pawtucket (81,436); Cranston (55,060); Woonsocket (50,211); Warwick (43,028).  
**State forests:** 9 (15,600 ac.).  
**State parks:** 11 (5,700 ac.).  
**State general revenue (1953):** \$64,333,676.  
**State general expenditure (1953):** \$60,343,056.

Little Rhode Island (it would fit into Texas 220 times), with the greatest density of population barring the District of Columbia, boasts the highest proportion of industrial workers of all the states. Leading industry is textiles, largely concentrated in Pawtucket, Providence and Woonsocket.

Providence is also one of the largest U. S. jewelry centers, and is important in the production of machinery and metal products.

With more than eight-tenths of the population living in urban areas, adjacent parts of the state are interested in dairying, poultry and truck farming. Potatoes, corn, apples, oats and hay lead the crop list. Of the state's land area, about one-seventh is farm cropland and open pasture; two-thirds is forested.

Newport is the site of the Naval War College and was long a show place for the luxurious summer homes built by some of New York's wealthiest people. The U. S. Naval Air Station is at Quonset in the town of North Kingstown.

Roger Williams founded Providence, and subsequently Rhode Island, in 1636 after he had been banished from Massachusetts for nonconformance to religious doctrine. William Blackstone, a fugitive from Massachusetts, is reputed to have settled in what is now Cumberland, before this date.

## SOUTH CAROLINA

**Capital:** Columbia.

**Governor:** James F. Byrnes (Dem., 1955).

**Entered Union & (rank):** May 23, 1788 (8).

**Seceded from Union:** Dec. 20, 1860.

**Re-entered Union:** July 18, 1868.

**Present constitution adopted:** 1895.

**Mottoes:** *Animus opibusque parati* (Prepared in minds and resources) and *Dum spiro spero* (While I breathe, I hope).

**State flower:** Carolina yellow jessamine (1924).

**State tree:** Palmetto tree (1939).

**State bird:** Carolina wren (1948).

**State song:** "Carolina" (1911).

**Nickname:** Palmetto State.

**Origin of name:** Same as for North Carolina.

**1940 population & (rank):** 1,899,804 (26).

**1950 population & (rank):** 2,117,027 (27).

**1953 estimated population:** 2,195,000.

**Area & (rank):** 31,055 sq. mi. (39).

**Geographic center:** In Richland Co., 13 mi. SE of Columbia.

**Number of counties:** 46.

**Largest cities:** Columbia (86,914); Charleston (70,174); Greenville (58,161); Spartanburg (36,795); Rock Hill (24,502).

**State forests:** 4 (123,000 ac.).

**State parks:** 22 (46,000 ac.).

**State total revenue (1951-52):** \$158,075,000.

**State general expenditure (1951-52):** \$150,386,210.

Once primarily agricultural, South Carolina has built so many big cotton textile mills that today the state's factories double the output of its farms in cash value. Agriculture has not, however, been completely replaced and today its chief crops are cotton, tobacco, peaches, corn, hay, oats, sweet potatoes and peanuts which are enhanced by the recent development of modern soil-conservation methods. Charleston, the busi-

est seaport, makes asbestos, wood, pulp and steel products.

Civil War hostilities were started in this state at Charleston, when, on April 12, 1861, South Carolina men bombarded and captured Fort Sumter. In Charleston harbor the first submarine was used in warfare.

Vasquez de Ayllon, who came from Santo Domingo with about 500 settlers in 1526, made the first attempt to colonize this state but the expedition was later wiped out by Indians. In succeeding years, Spanish attempts were successful.

## SOUTH DAKOTA

**Capital:** Pierre.

**Governor:** Sigurd Anderson (Rep., 1955).

**Organized as territory:** Mar. 2, 1861.

**Entered Union & (rank):** Nov. 2, 1889 (40).

**Present constitution adopted:** 1889.

**Motto:** Under God the people rule.

**State flower:** American pasqueflower (1903).

**State tree:** Black Hills spruce (1947).

**State bird:** Ring-necked pheasant (1943).

**State animal:** Coyote (1949).

**State colors:** Blue and gold (in state flag).

**State song:** "Hail! South Dakota" (1943).

**Nicknames:** Sunshine State; Coyote State.

**Origin of name:** Same as for North Dakota.

**1940 population & (rank):** 642,961 (38).

**1950 population & (rank):** 652,740 (40).

**1953 estimated population:** 657,000.

**Area & (rank):** 77,047 sq. mi. (15).

**Geographic center:** In Hughes Co., 8 mi. NE of Pierre.

**Number of counties:** 67.

**Largest cities:** Sioux Falls (52,696); Rapid City (25,310); Aberdeen (21,051); Huron (12,788); Watertown (12,699).

**State forests:** 4 (86,000 ac.).

**State parks:** 62 (80,000 ac.).

**State general revenue (1953):** \$74,643,410.

**State general expenditure (1953):** \$73,279,854.

Seventy-five per cent of the population of South Dakota is actively interested in agriculture. Its leading crops are rye, barley, oats, corn, wheat. Cattle raising and dairying are its stronger industries. The richest U. S. gold mine, the Homestake, is at Lead.

The Black Hills, a great tourist attraction, are the highest mountains east of the Rockies. Mt. Rushmore, in this group, is celebrated for the likenesses of Washington, Jefferson, Lincoln and Theodore Roosevelt, which were carved in stone by the late Gutzon Borglum. The Badlands offer very scenic masses of bare rock and clay unrelieved by any vegetation. It was in this state that the Sioux Indians, angered at the influx of the white men who were searching for gold, started the hostilities which ended in Custer's Massacre, on June 25, 1876, in Montana.

The French trader, Verendrye, entered this state in 1743, when he came down from Canada looking for a western ocean.

## TENNESSEE

**Capital:** Nashville.

**Governor:** Frank G. Clement (Dem., 1955).

**Entered Union & (rank):** June 1, 1796 (16).

**Seceded from Union:** June 24, 1861.



Re-entered Union: July 24, 1866.  
Present constitution adopted: 1870, amended for first time 1953.

Motto: Agriculture, commerce.

State flower: Iris (1933).

State tree: Tulip poplar (1947).

State bird: Mockingbird (1933).

Songs: "My Homeland, Tennessee" (1925) and "When It's Iris Time in Tennessee" (1935).

Nickname: Volunteer State.

Origin of name: From the name of the ancient capital of the Cherokee tribe.

1940 population & (rank): 2,915,841 (15).

1950 population & (rank): 3,291,718 (16).

1953 estimated population: 3,329,000.

Area & (rank): 42,246 sq. mi. (33).

Geographic center: In Rutherford Co., 5 mi. NE of Murfreesboro.

Number of counties: 95.

Largest cities: Memphis (396,000); Nashville (174,307); Chattanooga (131,041); Knoxville (124,769); Jackson (30,207).

State forests: 13 (143,742 ac.).

State parks: 17 (125,318 ac.).

State general revenue (1952-53): \$247,196,939.

State general expenditure (1952-53): \$246,236,320.

Tennessee won world prominence in 1945, for the atom bomb was made possible by the Clinton Engineer Works at Oak Ridge.

The state is now predominately industrial, with production including chemicals, food, textiles, virgin aluminum, shoes, lumber products, and metal work. Mineral products include phosphates, zinc, copper, lead, sinter iron, pyrites, high-grade pottery clay, coal and marble. Tennessee's agricultural production includes livestock, cotton, corn, tobacco, hay, dairy products, poultry and eggs.

Tennessee is the home of TVA which operates 29 dams and distributes power from 3 dams on the Cumberland River maintained by the Army Corps of Engineers. Benefits of flood control, navigation and electrical power reach into 6 other states (Kentucky, Alabama, North Carolina, Georgia, Virginia, and Mississippi). The Tennessee River, already the most completely used major river in the world, is insufficient to supply energy needs, and the power system is being doubled by use of steam generating plants.

The Battle of Shiloh was fought in this state during the Civil War, and the fighting on Lookout Mountain was called "The battle above the clouds."

Hernando de Soto entered the state in 1541.

## TEXAS

Capital: Austin.

Governor: Allan Shivers (Dem., 1955).

Entered Union & (rank): Dec. 29, 1845 (28).

Seceded from Union: Mar. 2, 1861.

Re-entered Union: Mar. 30, 1870.

Present constitution adopted: 1876.

Motto: Friendship.

State flower: Bluebonnet (1901).

State tree: Pecan (1919).

State bird: Mockingbird (1927).

State song: "Texas, Our Texas" (1930).

Nickname: Lone Star State.

Origin of name: From an Indian word meaning "friends."

1940 population & (rank): 6,414,824 (6).

1950 population & (rank): 7,711,194 (6).

1953 estimated population: 8,298,000.

Area & (rank): 267,339 sq. mi. (1).

Geographic center: In McCulloch Co., 15 mi. NE of Brady.

Number of counties: 254.

Largest cities: Houston (596,163); Dallas (434,462); San Antonio (408,442); Fort Worth (278,778); Austin (132,459).

State forests: 5 (6,510 ac.).

State parks: 43.

State general revenue (1952-53): \$737,188,310.

State general expenditure (1952-53): \$662,495,496.

Big, sprawling, vigorous Texas, comprising one-twelfth of the entire area of the United States, is the richest political subdivision in the world with the possible exception of the Russian Ukraine, and is the only state that may, by Congressional statute, divide into five parts if it so desires. There is very little possibility of this ever being done because Texas and Texans live by its bigness. Texas is a natural leader in oil, natural gas, cotton, cattle, hellum, sulfur, sheep, wool, onions and turkeys.

The distance from El Paso to Beaumont is a greater distance than from New York to Chicago. Texas supports possibly the most ardent local enthusiasts in the nation, who are always quick to boast of her.

Amarillo has the only U. S. hellum plant; over the Neches River, at Port Arthur, is the most elevated highway bridge in the world. In Pecos County is the deepest hole in the world—an oil well of 15,279 feet.

Cabeza de Vaca explored the state in 1528. Since 1685, it has been under the jurisdiction of 6 separate governments: those of France, Spain, Mexico, the Republic of Texas, the Confederacy and the United States.

## UTAH

Capital: Salt Lake City.

Governor: J. Bracken Lee (Rep., 1955).

Organized as territory: Sept. 9, 1850.

Entered Union & (rank): Jan. 4, 1896 (45).

Present constitution adopted: 1896.

Motto: Industry.

State flower: Sego lily (1911).

State tree: Blue spruce (1933).

State bird: Seagull (unofficial).

State emblem: Beehive.

State song: "Utah, We Love Thee."

Nickname: Beehive State.

Origin of name: From the Ute tribe, meaning "people of the mountains."

1940 population & (rank): 550,310 (41).

1950 population & (rank): 688,862 (38).

1953 estimated population: 734,000.

Area & (rank): 84,916 sq. mi. (10).

Geographic center: In Sanpete Co., 3 mi. N of Manti.

Number of counties: 29.

Largest cities: Salt Lake City (182,121); Ogden (57,112); Provo (28,937); Logan (16,832); Murray (9,006).

State forests: None.

State parks: 3 (10 ac.).

State general revenue (1951): \$89,679,978.82.

State general expenditure (1951): \$86,782,876.45.

Utah, rich in natural resources, has long been recognized for its copper, gold, silver.

lead and zinc. Also, it produces all the elements necessary for the manufacture of steel: iron, lime, dolomite, fluorspar, manganese and coal for coking. Uranium mining has recently become a major industry. The state is also developing an oil industry, and this resource may become a major factor in Utah's economy.

Utah's crops requiring extensive irrigation include sugar beets, potatoes, hay, onions and wheat. Various garden crops, such as beans, peas and tomatoes, and fruits, such as pears, peaches, apples and apricots, make up an ever-growing industry. Eggs and commercial poultry are also among the products of Utah.

Brigham Young led the Mormons into the area in 1847. Six times in the next forty years, the area applied for statehood and was refused because polygamy was practiced. In 1896, when polygamy was abandoned by the Mormon Church, Utah was admitted into the Union.

Great Salt Lake, lying in the north central area, has long been a world wonder. It has no known outlet, and its salt content is about six times that of the ocean.

Spanish explorers in 1540 were probably the first whites in the area.

## VERMONT

**Capital:** Montpelier.

**Governor:** Lee E. Emerson (Rep., 1955).

**Entered Union & (rank):** Mar. 4, 1791 (14).

**Present constitution adopted:** 1793.

**Motto:** Vermont—freedom and unity.

**State flower:** Red clover (1894).

**State tree:** Sugar maple (1949).

**State bird:** Hermit thrush (1941).

**State song:** "Hail to Vermont" (1937).

**Nickname:** Green Mountain State.

**Origin of name:** From the French, meaning "green mountain."

**1940 population & (rank):** 359,231 (46).

**1950 population & (rank):** 377,747 (45).

**1953 estimated population:** 377,000.

**Area & (rank):** 9,609 sq. mi. (42).

**Geographic center:** In Washington Co., 4.5 mi. SSE of Roxbury Village.

**Number of counties:** 14.

**Largest cities:** Burlington (33,155); Rutland (17,659); Barre (10,922); Montpelier (8,599); St. Albans (8,552).

**State forests:** 24 (68,936 ac.).

**State parks:** 21 (6,226 ac.).

**State revenue (1953):** \$46,893,061.

**State expenditure (1953):** \$44,725,897.

Vermont, the only New England state without a seacoast (and the last to be settled because of this), leads the nation in marble, granite, asbestos and maple syrup production. In ratio to population it keeps more dairy cows than any other state. Vermont's soil is devoted to dairying, truck farming and fruit growing, its rugged area precluding extensive farming. This same quality, however, along with a bracing dry climate, makes the state popular as a summer resort and as a center of winter sports. Two-thirds of the total land area of the state is classified as forest land.

From 1777 to 1791, Vermont was an independent state of indefinite status with some national perquisites and then was the first state after the original thirteen to join the Union. It was also the first state to forbid slavery. Vermont has been Republican since 1854; only Georgia on the Democratic side ties that record for consistency.

Samuel de Champlain, in 1609, was the first white man to see the state.

## VIRGINIA

**Capital:** Richmond.

**Governor:** John S. Battle (Dem., 1954).

**Entered Union & (rank):** June 25, 1788 (10).

**Succeeded from Union:** Apr. 17, 1861.

**Re-entered Union:** Jan. 27, 1870.

**Present constitution adopted:** 1902.

**Motto:** *Sic semper tyrannis* (Thus always to tyrants).

**State flower:** American dogwood (1918).

**State bird:** Cardinal.

**State song:** "Carry Me Back to Old Virginny" (1940).

**Nicknames:** The Old Dominion; Cavalier State.

**Origin of name:** In honor of Elizabeth, "Virgin Queen" of England.

**1940 population & (rank):** 2,677,773 (19).

**1950 population & (rank):** 3,318,680 (15).

**1953 estimated population:** 3,547,000.

**Area & (rank):** 40,815 sq. mi. (35).

**Geographic center:** In Appomattox Co., 11 mi. S of E of Amherst.

**Number of counties:** 100, plus 24 independent cities.

**Largest cities:** Richmond (230,310); Norfolk (213,513); Roanoke (91,921); Portsmouth (80,039); Alexandria (61,787).

**State forests:** 6 (7,010 ac.).

**State parks:** 9 (19,026 ac.).

**State revenue (1952):** \$359,010,010.

**State expenditure (1952):** \$362,033,045.

Virginia is bound up with American history. Jamestown, founded in 1607, was the first permanent English settlement in North America; slavery was introduced in the state in 1619; the Revolutionary and Civil Wars were both ended in this state.

Agriculture and tobacco are Virginia's mainstays. Apples, cotton, wheat, oats, potatoes, barley and sweet potatoes are her crops. Richmond makes more cigarettes than any other city in the world. Virginia's hams are world famous. There is a substantial livestock industry in southwest Virginia. Industry, particularly in the textile lines, is developing rapidly.

Norfolk, together with Portsmouth and Newport News, makes up the busy Port of Hampton Roads.

Monticello, home of Jefferson; Mount Vernon, home of Washington; and Arlington National Cemetery bring visitors to this Old Dominion state annually.

Virginia is called the "Mother of Presidents," 8 Chief Executives having been born in the state.

The explorations of Sir Walter Raleigh, in 1584, were responsible for the birth of this state, which at that time included the entire Atlantic coast north of the Spanish settlements.

## WASHINGTON

**Capital:** Olympia.

**Governor:** Arthur B. Langlie (Rep., 1957).

**Organized as territory:** Mar. 2, 1853.

**Entered Union & (rank):** Nov. 11, 1889 (42).

**Present constitution adopted:** 1889.

**Motto:** *Al-Ki* (Indian word meaning Bye and Bye).

**State flower:** Rhododendron (1949).

**State tree:** Hemlock (1947).

**State bird:** Goldfinch (1951).

**State colors:** Green and gold (1925).

**State song:** "Washington's Song" (1909).

**Nicknames:** Evergreen State; Chinook State.

**Origin of name:** In honor of Geo. Washington.

**1940 population & (rank):** 1,736,191 (30).

**1950 population & (rank):** 2,378,963 (23).

**1953 estimated population:** 2,478,000.

**Area & (rank):** 68,192 sq. mi. (19).

**Geographic center:** In Chelan Co., 10 mi. S of W of Wenatchee.

**Number of counties:** 39.

**Largest cities:** Seattle (467,591); Spokane (161,721); Tacoma (143,673); Yakima (38,486); Bellingham (34,112).

**State forests:** 2 (290,000 ac.).

**State parks:** 75 (60,000 ac.).

**State general revenue funds (1953-54):** \$343,656,600.

**State general expenditure (1953-54):** \$322,717,309.

Washington is one of the leaders in lumber production. Its rugged surface is rich in stands of Douglas fir, yellow and white pine, spruce, larch and cedar. The state's other first is apples. Food and lumber products and a wide variety of goods flow from Washington factories.

Grand Coulee Dam, built on the Columbia River for power and irrigation, contains the world's most powerful hydroelectric plant, with a peaking capability of producing a continuous output of 2,340,000 kw. About 90% of the electric energy consumed in the state is generated by water-power plants. Low-cost power makes Washington the owner of more electric lights per capita than any other state in the nation.

The Hanford Engineer Works, north of Pasco, has been set up as the world's first full-scale plant for atom bombs.

Bruno Heceta landed in 1775.

## WEST VIRGINIA

**Capital:** Charleston.

**Governor:** William C. Marland (Dem., 1957).

**Entered Union & (rank):** June 20, 1863 (35).

**Present constitution adopted:** 1872.

**Motto:** *Montani semper liberi* (Mountaineers always free).

**State flower:** Rhododendron (1903).

**State tree:** Sugar maple (1949).

**State bird:** Cardinal (1949).

**State colors:** Blue and gold (unofficial).

**State songs:** "West Virginia, My Home Sweet Home" (approved 1947 as one of songs of state); "West Virginia Hills" (by custom).

**Nickname:** Mountain State.

**Origin of name:** Same as for Virginia.

**1940 population & (rank):** 1,901,974 (25).

**1950 population & (rank):** 2,005,552 (29).

**1953 estimated population:** 1,937,000.

**Area & (rank):** 24,181 sq. mi. (40).

**Geographic center:** In Braxton Co., 4 mi. E of Sutton.

**Number of counties:** 55.

**Largest cities:** Huntington (86,353); Charleston (73,501); Wheeling (58,891); Clarksburg (32,014); Parkersburg (29,684).

**State forests:** 10 (96,418 ac.).

**State parks:** 19 (38,752 ac.).

**State general revenue (1952-53):** \$86,654,108.

**State general expenditure (1952-53):** \$87,905,176.

Mountainous West Virginia is the coal mining leader of the nation. Geologists believe that if all other U. S. coal mines shut down, West Virginia alone could supply the country for 250 years with its deposits of bituminous (soft) coal. The state also ranks high in natural gas, oil, quarry products and hardwood lumber. Cattle is the main product. Leading crops include wheat, corn, oats, hay, tobacco and fruit.

West Virginia was created when its residents refused to secede from the Union and severed itself from Virginia during the Civil War era. Like many mountain states, West Virginia has an equable climate without extremes. White Sulphur Springs, in Greenbrier County, is a famous health resort. Mountain streams give the state one of the highest U. S. water-power potentials.

In 1671, Captain Thomas Batts and a party from eastern Virginia probably were the first whites to see the area.

## WISCONSIN

**Capital:** Madison.

**Governor:** Walter J. Kohler (Rep., 1955).

**Organized as territory:** Apr. 20, 1836.

**Entered Union & (rank):** May 29, 1848 (30).

**Present constitution adopted:** 1848.

**Motto:** Forward.

**State flower:** Violet.

**State tree:** Sugar maple.

**State bird:** Robin.

**State animal:** Badger.

**State song:** "On Wisconsin" (unofficial).

**Nickname:** Badger State.

**Origin of name:** French corruption of an Indian word meaning "gathering of waters."

**1940 population & (rank):** 3,137,587 (13).

**1950 population & (rank):** 3,434,575 (14).

**1953 estimated population:** 3,518,000.

**Area & (rank):** 56,154 sq. mi. (25).

**Geographic center:** In Wood Co., 9 mi. SE of Marshfield.

**Number of counties:** 71.

**Largest cities:** Milwaukee (637,392); Madison (96,056); Racine (71,193); Kenosha (54,368); Green Bay (52,735).

**State forests:** 7 (275,770 ac.).

**State parks:** 30 (17,700 ac.).

**State total net revenue, all funds (1952-53):** \$371,278,330.

**State total net expenditure, all funds (1952-53):** \$374,472,922.

Wisconsin is the first dairying state and leads in dairy cattle and the production of cheese and other milk products. Until some forty years ago, when its forests were exhausted, Wisconsin was a leader in lumbering. It has since turned its attention to



agriculture and manufacturing. The making of paper, autos, beer, machinery and furniture are its main factory interests. Cranberries, hay, hemp, oats, rye and tobacco are its secondary agricultural pursuits. It leads the country in such products as peas, corn and beets for canning.

Wisconsin pioneered in social legislation, providing pensions for the blind (1907), aid to dependent children (1913) and old-age assistance (1925). In 1932, it was the first state to enact an unemployment compensation law. In labor legislation, the state has also pioneered in important laws, among them the first workmen's compensation law actually to take effect.

Jean Nicolet, French explorer, seeking a northwest passage in 1634, was the first white man to see the state.

## WYOMING

**Capital:** Cheyenne.

**Governor:** C. J. "Doc" Rogers (Rep., 1955).

**Organized as territory:** July 25, 1868.

**Entered Union & (rank):** July 10, 1890 (44).

**Present constitution adopted:** 1890.

**Motto:** *Cedant arma togae* (Let arms yield to the gown).

**State flower:** Indian paintbrush (1917).

**State tree:** Cottonwood (1947).

**State bird:** Meadow lark (1927).

**State insignia:** Bucking horse (unofficial).

**State song:** "Wyoming State Song" (unofficial).

**Special legal holiday:** Arbor Day (by governor's designation).

**Nickname:** Equality State.

**Origin of name:** From the Indian, meaning "mountains and valleys alternating"; named after the Wyoming Valley in Pa.

**1940 population & (rank):** 250,742 (47).

**1950 population & (rank):** 290,529 (47).

**1953 estimated population:** 306,000.

**Area & (rank):** 97,914 sq. mi. (8).

**Geographic center:** In Fremont Co., 58 mi. N of E of Lander.

**Number of counties:** 23, plus Yellowstone National Park.

**Largest cities:** Cheyenne (31,935); Casper (23,673); Laramie (15,581); Sheridan (11,500); Rock Springs (10,857).

**State forests:** None.

**State parks:** 2 (1,060 ac.).

**State general revenue (1949-50):** \$42,246,000.

**State general expenditure (1949-50):** \$41,618,000.

Wealthy in wool, cattle, oil and coal, Wyoming was first in U. S. history to insure woman's place in politics. In 1869, it gave women the vote and Mrs. Nellie Tayloe Ross, who held office in 1925-27, was the first U. S. woman governor.

Second in mean elevation to Colorado, Wyoming has many lures for the tourist trade, notably Yellowstone National Park. Cheyenne is famous for its annual "Frontier Days" celebration, which brings in visitors from everywhere. One of the world's largest subbituminous coal fields lies near Gillette. Big game hunting is good in many parts of the state.

Trappers in 1812 were probably the first white men to settle this state, although John Colter, a member of the Lewis and Clark expedition, reached the northwest corner in 1807.

## Self-governing U. S. Territories

### ALASKA

**Capital:** Juneau.

**Governor:** B. Frank Heinzelman (1957).

**Organized as territory:** 1912.

**Territorial flower:** Forget-me-not.

**Territorial bird:** Raven (unofficial).

**Territorial song:** "Alaska, My Alaska" (unofficial).

**Origin of name:** Corruption of native word meaning "great country."

**1939 population:** 72,524.

**1950 population:** 128,643.

**1953 estimated population:** 156,000.

**1939-50 population change:** +77.4%.

**Area:** 586,400 sq. mi. (incl. Aleutians).

**Geographic center (including Islands):** 95 mi. south of Fort Gibbon.

**Largest cities:** Anchorage (11,254), Juneau (5,956), Fairbanks (5,771), Ketchikan (5,305), Seward (2,114).

Alaska, the biggest of U. S. possessions (including the Aleutian Islands) was called "Seward's Folly" in 1867, when that Secretary of State arranged for its purchase from Russia for \$7,200,000. Since then Alaska has returned approximately \$3,500,000,000 worth of products to the U. S.

Canned salmon is Alaska's principal product. It mines gold, supplies all domestically mined U. S. tin and also turns out platinum, coal, antimony, silver, mercury, lead, tungsten, gypsum, limestone and marble. The Pribilof Islands, in the Bering Sea, are world famous as the breeding ground of the Alaska fur seal, which is under careful government control. Beaver, muskrat, otter, mink and other furs also abound.

Mt. McKinley, in the south central part, is 20,269 feet high, the tallest peak in North America. With its wild interior, still partly unexplored, this territory is a hunter's paradise. With only one person for every four square miles, Alaska is by far the most thinly settled of U. S. lands. Sitka was its capital until 1912.

Alaska has magnificent glaciers and active volcanoes. Winter temperatures in the interior have been known to register 60° below zero. However, summer temperatures in the same area have been recorded at 99° above zero; and large parts of the territory, especially in the southeast, enjoy mild climate in both summer and winter.

Alaska's Governor is appointed by the President to a 4-year term, and there is a locally elected 2-house legislature. The ter-

territory's elected delegate to the U. S. House of Representatives has floor privileges but no vote. Legislation is pending in Congress for the admission of Alaska as a state.

The Aleutians include the following island groups (and major islands): Fox Islands (Unimak, Akutan, Unalaska, Umnak); Islands of the Four Mountains (Chuginadak, Kagamil, Carlisle, Herbert); Andreanof Islands (Atka, Tanaga, Adak, Kanaga); Rat Islands (Kiska, Amchitka, Semisopochnoi, Rat); Near Islands (Agattu, Attu). In June 1942, the Japanese occupied Attu and Kiska. However, Attu was retaken by the U. S. in May 1943; Kiska was evacuated by the Japanese in Aug. 1943 after extensive shelling and bombing of the island.

Vitus Bering, a Dane working for the Russians, and Alexei Chirikov discovered Alaska and the Aleutians in 1741. The first permanent settlement was established in 1783 on Kodiak Island.

## HAWAII

**Capital:** Honolulu (on Oahu).

**Governor:** Samuel Wilder King (1957).

**Organized as territory:** 1900.

**Motto:** *Ua Mau Ke Ea O Ka Aina I Ka Pono* (The life of the land is preserved by righteousness).

**Territorial flower:** Hibiscus.

**Territorial song:** "Hawaii Pono!" (unofficial).

**Nickname:** Paradise of the Pacific.

**1940 population:** 423,300.

**1950 population:** 499,794.

**1940-50 population change:** +18.1%.

**Area:** 6,454 sq. mi. (incl. outlying islands).

**Counties:** 4.

**Largest cities:** Honolulu (248,034), Hilo (27,198), Wahiawa (8,369), Kailua-Lanikai (7,740), Wailuku (7,424).

Hawaii, 2,100 miles west-southwest of San Francisco, is a 390-mile chain of islets and 8 main islands—Hawaii, Kahoolawe, Maui, Lanai, Molokai, Oahu, Kauai, and Niihau. Kure (Ocean) Island, an uninhabited islet in the Leeward Islands, and Palmyra, in the Line Islands, are administratively part of Hawaii.

Hawaii's temperature is mild and the soil is fertile for tropical fruits and vegetables. Cane sugar and pineapple are its chief products, approximately 75% of the world's canned pineapple being produced in the islands. Hawaii also grows coffee, rice, cotton, bananas, nuts and potatoes. Some livestock and poultry are raised. The tourist business is Hawaii's fourth largest source of income. Approximately 85% of the island's population, although racially heterogeneous, is native to the U. S.

Hawaii's highest peak, Mauna Kea, rises to 13,784 feet and is, in a sense, the world's highest mountain since it springs from an ocean floor 18,000 feet below sea level. Kilauea, on Hawaii, is one of the world's most active volcanoes. The islands have no snakes and their only native mammal is a small bat of which there are many species.

Hawaii's Governor is appointed by the President to a 4-year term, and there is a locally elected 2-house legislature. The territory's delegate to the U. S. House of Representatives has floor privileges but no vote. Legislation is pending in Congress for the admission of Hawaii as a state.

Hawaii was discovered in 1778 by Captain James Cook, an Englishman, who named it the Sandwich Islands. It was ruled by native monarchs until 1893, thereafter as a republic until 1898, when it ceded itself to the U. S.

## COMMONWEALTH OF PUERTO RICO

**Capital:** San Juan.

**Governor:** Luis Muñoz Marín.

**Song:** "La Borinqueña."

**1940 population:** 1,869,255.

**1950 population:** 2,210,703.

**1940-50 population change:** +18.3%.

**Area:** 3,435 sq. mi.

**Largest cities:** San Juan (357,205\*); Ponce (99,492); Mayaguez (58,944); Caguas (33,759); Arecibo (28,659).

\* Includes Río Piedras (132,438), which was annexed in 1951.

Puerto Rico, ninety-five miles long and at the northeast head of the Caribbean Sea, is a big cane sugar and rum producer and one of the most densely populated sections in the world. Other crops grown in the Commonwealth are tobacco, citrus fruits, pineapples, rope and coffee.

The island was seized by the U. S. in 1898 in the Spanish-American War. It is administered by a Governor, who, as a result of a

bill signed by President Truman on Aug. 5, 1947, is elected by popular vote, and a locally-elected Congress. There is also a Resident Commissioner in Washington with a voice in the House of Representatives but no vote. On Jan. 4, 1951, Puerto Ricans voted for self-rule under a constitution.

On July 25, 1952, the Constitution of the Commonwealth of Puerto Rico was proclaimed by Gov. Luis Muñoz Marín. It had been overwhelmingly approved in the elections held Mar. 3, 1952.

The Commonwealth is now a wholly autonomous community in all matters regarding its local government, and is voluntarily associated with the U. S.

The island was formerly known as Porto Rico, but in 1932, Congress made the present spelling official.

Columbus discovered the island of Puerto Rico on his second voyage to America in 1493. Ponce de León conquered it for Spain in 1509 and became governor in 1510. The city of San Juan was established in 1521.

## Non Self-governing U. S. Territories

### AMERICAN SAMOA

**Capital:** Pago Pago (on Tutuila Island).

**Governor:** Richard Barrett Lowe.

**1940 population:** 12,908.

**1950 population:** 18,937.

**1940-50 population change:** +46.7%.

**Area:** 75.3 sq. mi.

American Samoa, a group of 5 volcanic islands and 2 coral atolls located some 2,600 miles south of Hawaii in the South Pacific Ocean, is administered by the Interior Dept. The largest island, Tutuila, is the center of government and commerce. Pago Pago Bay is one of the finest harbors in the Pacific.

By the Treaty of Berlin signed Dec. 2, 1899, and ratified Feb. 16, 1900, the U. S. was internationally acknowledged to have rights extending over all the islands of the Samoa group east of longitude 171° west of Greenwich. On April 17, 1900, the Chiefs of Tutuila and Aunu'u ceded possession of those islands to the U. S. In 1904, the Chiefs of the Manu'a Islands did likewise. Swains Island, some 200 miles north of Samoa, was included as part of the territory by Act of Congress Mar. 4, 1925; and on Feb. 20, 1929, Congress formally accepted sovereignty over the entire group and placed the responsibility for administration in the hands of the President. From 1900 to 1951, by Presidential direction, the Department of the Navy governed the territory.

The principal products are copra, mats, handicrafts, and canned fish.

### BAKER, HOWLAND AND JARVIS

These Pacific islands were not to play a role in the extraterritorial plans of the U. S. until May 13, 1936, when the U. S. perfected its claim. President F. D. Roosevelt, at that time, placed them under the control of and jurisdiction by the Secretary of the Interior for administration purposes.

Baker Island is a saucer-shaped atoll with an area of approximately one square mile and an elevation of 20 feet. It is about 1,650 miles from Hawaii.

Howland Island, 36 miles to the northeast, is approximately one and a half miles long and half a mile wide and rises to an elevation of 18 feet. Both these islands are near the crossing of the Equator and the International Date line.

Jarvis Island is several hundred miles to the east and is approximately two miles long by one and an eighth miles wide. It is slightly south of the Equator.

### CANAL ZONE

**Headquarters:** Balboa Heights, C. Z.; 24 State St., New York City.

**Governor-President:** Brig. Gen. John S. Seybold.

**1940 population:** 51,827.

**1950 population:** 52,822.

**1940-50 population change:** +1.9%.

**Area:** 648.01 sq. mi.

The Canal Zone is a 50-mile strip between the Atlantic and Pacific Oceans which was granted to the U. S. by the Republic of Panamá by treaty in 1903 (ratified Feb. 26, 1904). It extends roughly 5 miles on either

side of the center line of the Panama Canal, forming what might be termed a protective belt for the vital waterway over which the U. S. exercises complete sovereignty.

The 1903 treaty provided for the payment of \$10,000,000 by the U. S. to Panamá upon ratification of the treaty and \$250,000 in gold annually, beginning 9 years after ratification. The annual payments were increased to \$430,000 after the U. S. went off the gold standard.

The history of the Canal goes back to 1534, when King Charles V of Spain ordered a survey made. Construction of the waterway was formally inaugurated in Jan. 1880 by the French Canal Co. under a concession granted by New Granada (Colombia) 2 years earlier. The canal rights and properties of the second French Canal Co. were bought by the U. S. for \$40,000,000, the transfer being made May 4, 1904, in Panama City. The construction of the Canal was completed 10 years later, and the first commercial transit was made Aug. 15, 1914, by the S. S. *Ancon*, a government-owned vessel.

The Canal is 40.27 miles from shore line to shore line and 50.72 miles from deep water in the Caribbean to deep water in the Pacific. The Panama Railroad, completed in 1855, is owned by the Panama Canal Co. It roughly parallels the Canal channel, running 47.64 miles from Colón to Panama City.

The Panama Canal Locks, which provide a water bridge between the two oceans, are Gatún Locks on the Atlantic side and Pedro Miguel and Miraflores Locks on the Pacific side. They lift or lower ships 85 feet between sea level and Gatún Lake level in 3 steps on each side of the Isthmus. Each of the twin chambers in every flight of locks has a usable length of 1,000 feet, and width of 110 feet, and is about 70 feet deep.

The Canal Zone is, in effect, a government reservation, and in general no private enterprise is permitted except that relating directly to the operation of the waterway. The Governor, who is appointed by the U. S. President, administers the Canal Zone Government, which is charged with the civil government, including health, sanitation and protection of the Zone. The Governor is also ex officio President of the Panama Canal Company, which is a corporate agency of the U. S. charged with the maintenance and operation of the Canal and related business activities.

All ships afloat, with the exception of the commercial liners of the Queen Mary class and U. S. Aircraft carriers of the Roosevelt class, can transit the Panama Canal. Prior to the beginning of World War II, work was started on the construction of a third set of locks, which were to be much larger than existing installations. This work was suspended soon after the war started and has not been resumed.

### CANTON AND ENDERBURY

Canton and Enderbury islands, the largest of the Phoenix group, are jointly owned and supervised by the U. S. and Great Brit-



ain after an agreement signed on Apr. 6, 1939. Canton is triangular in shape and the largest of the eight islands of this group. It lies approximately 1,600 miles southwest of Hawaii in the Pacific and was discovered at the turn of the eighteenth century by U. S. whalers. It was surveyed by Commander R. W. Meade who named it after a whaler ship. It had, in 1952, a population of 316, including Europeans. Enderbury is rectangular in shape and is 2.7 miles long by one mile wide. It is unpopulated and lies about 32 miles southeast of Canton.

## GUAM

Capital: Agaña.

Governor: Ford Quint Elvidge.

1940 population: 22,290.

1950 population: 59,498.

1940-50 population change: +166.9%.

Area: 206 sq. mi.

Guam, the largest of the Mariana Islands, is independent of the trusteeship assigned to the U. S. in 1947. It was acquired by the U. S. from Spain in 1898 (occupied 1899) and was placed under Navy Department administration.

In World War II, Guam was seized by the Japanese on Dec. 11, 1941; but on July 27, 1944, it was once more under the U. S.

On Aug. 1, 1950, President Truman signed a bill which granted U. S. citizenship to the people of Guam and which established limited self-government. The civilian governor operates under supervision of the Department of the Interior.

The principal crops are maize, sweet potatoes, taro and cassava. Cattle, pigs and chickens are raised principally for family use.

Added stimulus to Guam's economy was given by the development in 1950 of a commercial port at Apra Harbor under the administration of the Guam government.

## JOHNSTON ISLAND

This island was originally discovered by Captain Charles James Johnston of *H.M.S. Cornwallis* on Dec. 14, 1807. On July 27, 1858, it was claimed by Hawaii and became a possession of the U. S. The island is about 600 miles southwest of Hawaii and about one and a half miles long by half a mile wide.

## KINGMAN REEF

This reef was discovered by Captain W. E. Kingman in Nov., 1853, and is the smallest land of U. S. sovereignty. It is 150 feet long by 120 feet wide at high tide. At low tide, two other islets of this atoll appear. It is approximately 1,000 miles south of Hawaii.

**KURE (OCEAN) ISLAND.** See HAWAII

## MIDWAY

Midway, lying about 1,200 miles west-northwest of Hawaii, was discovered by Captain N. O. Brooks of the Hawaiian bark

*Gambia* on July 5, 1859, in the name of the U. S. It was formally declared a U. S. possession in 1867, and in 1903 Theodore Roosevelt made it a naval reservation. Sand and Eastern Islands, with 850 acres and 328 acres respectively, are its largest individual islands. In 1935 it became a regular stopover for commercial transpacific flights. Commercial activities ceased in 1950. During the past war it was the scene of the first decisive defeat suffered by the Japanese. The total group comprises an area of twenty-eight square miles.

**PALMYRA.** See HAWAII

## VIRGIN ISLANDS OF THE UNITED STATES

Capital: Charlotte Amalie (on St. Thomas).

Governor: Archie A. Alexander.

1940 population: 24,889 (St. Croix, 12,902; St. Thomas, 11,265; St. John, 722).

1950 population: 26,665.

1940-50 population change: +7.1%.

Area: 133 sq. mi. (St. Croix, 82; St. Thomas, 32; St. John, 19).

The Virgin Islands, consisting of 9 main islands and some 75 islets, were discovered by Columbus in 1493. Since 1666, England has held 6 of the main islands; the other 3 (St. Croix, St. Thomas and St. John), as well as about 50 of the islets, were eventually acquired by Denmark, which named them the Danish West Indies. In 1917, these islands were purchased by the U. S. from Denmark for \$25 million.

Congress granted U. S. citizenship to Virgin Islanders in 1927; and, in 1931, administration was transferred from the Navy to the Department of the Interior. Universal suffrage was given in 1936 to all persons who could read and write the English language. The Governor is appointed by the President of the U. S.

About 70% of the population is Negro, and there is limited farming, fishing and cattle raising. Vegetables, citrus fruits and coconuts are raised, and the chief items of export are rum and bay rum.

## WAKE ISLAND

Wake Island, about halfway between Midway and Guam, is actually the three islets of Wilkes, Peale and Wake. They were discovered by the British in 1796 and annexed by the U. S. in 1898. The entire area comprises four square miles. In 1938, Pan American Airways established a seaplane base and it has been used as a commercial base since then. On Dec. 8, 1941, it was attacked by the Japanese, who finally took possession on Dec. 23. It was surrendered by the Japanese on Sept. 4, 1945. On Oct. 15, 1950, it was the scene of a conference between President Truman and General MacArthur.

The population of the island in 1953 was 625.

## U. S. Trusteeships

In 1885, Germany assumed a protectorate over the Marshall Islands; and, in 1899, she purchased the Northern Mariana and Caroline Islands from Spain. These islands were occupied by the Japanese in 1914 and were mandated to Japan by the League of Nations in 1919. On Apr. 2, 1947, the U. N. Security Council adopted and set up the Strategic Trust Territory of the Pacific Islands and assigned the Northern Marianas, Carolines and Marshalls to the U. S. The measure was approved by the President, with the agreement of Congress, on July 18, 1947. Administration was transferred from the Navy to the Department of the Interior on July 1, 1951. However, responsibility for the administration of Saipan and Tinian was retransferred to the Navy on Jan. 1, 1953.

The entire group comprises more than 2,000 islands, but the total land area is only 687 sq. mi., many of the islands being only tiny coral reefs. The Micronesians are the main cultural group, the inhabitants of the Northern Marianas being most advanced.

### MARIANA ISLANDS

The Mariana Islands, east of the Philippines and south of Japan, include the islands of Guam, Rota, Saipan, Tinian, Pagan, Guguan, Agrihan and Aguijan. Guam, the largest, is independent of the trusteeship, having been acquired by the U. S. from Spain in 1898. (For information on Guam, see page 191.)

The soil is suitable for the raising of sugar cane, and a large sugar industry was built up in Japanese times.

### CAROLINE ISLANDS

The Caroline Islands, east of the Philippines and south of the Marianas, include the Yap, Truk and Palau groups and the islands of Ponape and Kusaie, as well as many coral atolls.

The islands are composed chiefly of volcanic rock, and their peaks rise 2,000 to 3,000 feet above sea level. Chief products of the islands are coconuts and copra.

### MARSHALL ISLANDS

The Marshall Islands, east of the Carolines, are divided into two chains: the western or Ralik group, including the atolls Jaluit, Kwajalein, Wotho, Bikini and Eniwetok; and the eastern or Ratak group, including the atolls Mill, Majuro, Maloelap, Wotje and Likiep.

The islands are of the coral-reef type and rise only a few feet above sea level. The chief crop is coconuts; exports include copra, tortoise shell, mother-of-pearl, etc.

Bikini and Eniwetok have been the scene of several atom-bomb tests.

## Islands Under Provisional U. S. Administration

In accordance with the Japanese peace treaty signed Sept. 8, 1951, the U. S. may propose that the U. N. assign to it, as a trusteeship, the following former Japanese territory: the Ryukyu Islands south of 29° n. lat. (largest: Okinawa); the Bonin Islands (largest: Chichi Jima); the Volcano Islands

(including Iwo Jima); Rosario Island; Parece Vela; and Marcus Island. It was also agreed in the treaty that, until such trusteeship is actually granted, the U. S. will administer the islands. As of July 1954, no action had been taken by the U. S. toward bringing about this trusteeship.

## CITIES

We planned the INFORMATION PLEASE ALMANAC as a book of national scope and interest. We avoided emphasis on and identification with a single city or state, as has been characteristic of all almanacs heretofore. Therefore, in designing this section on cities of the United States, we have included as many as our space permitted. To obtain accurate and authoritative information we have gone to the city officials and they have not only furnished the statistics, but have checked the narratives in this section. We appreciate the co-operation of all these city officials.

### ATLANTA, GA.

Incorporated as city: 1847.  
Mayor: William B. Hartsfield (Jan., 1958).  
1940 population & (rank): 302,288 (28).  
1950 population & (rank): 331,314 (33).  
1953 estimated population: 467,300  
1940-50 population change: +9.6%.  
1952 area: 117.47 sq. mi.  
Altitude: Highest, 1,050 ft.; lowest, 940.  
Location: In NW central part of state, near Chattahoochee River.  
Counties: In Fulton and De Kalb Cos.; seat of Fulton Co.  
Churches: For whites, more than 330; for Negroes, more than 150.  
City-owned parks and parkways: 146 (2,350 ac.).  
Telephones (April, 1954): 245,000.  
Families with radios (1952): 202,650.

Television sets (1952): 158,000.  
Radio stations: AM, 10; FM, 5.  
Television stations: 3.  
Assessed valuation (1953): \$700,000,000.  
City tax rate (1953): \$25 per \$1,000.  
Bonded debt (1953): \$28,520,626.  
Revenue (1953): \$30,942,022.\*  
Expenditure (1953): \$32,660,804.

\* Does not include \$2,216,608 brought forward from 1952.

One of the three largest paintings in the world is in Atlanta's Grant Park. The Cyclorama is 400 feet around, 50 feet high and weighs 18,000 pounds. It depicts one of the great moments of Atlanta's history—the Battle of Atlanta.

Atlanta was a strategic point for the Confederates in the Civil War—the chief base

for recruiting and supplies in the far South, and the most important railway junction. The Battle of Atlanta, depicted in the Cyclorama, was fought on July 22, 1864, southeast of the city. General John B. Hood, commanding the Confederate forces, attacked General Sherman's army in an attempt to stop his progress through Georgia. The battle was inconclusive, the casualties terrific: an estimated 35,000. The two armies settled down to a siege which ended with the fall of Atlanta on Sept. 1.

General Sherman took possession of the city, rested his army until November, then burned Atlanta to the ground and started his devastating march to the sea.

Today Atlanta is one of the important financial and industrial centers of the Southeast. Its factories turn out 3,300 different commodities, including cotton goods, cottonseed oil, furniture and machinery. One of its best-known products is Coca-Cola, the formula for which was devised in an Atlanta home. It was first sold in 1886 at a little drugstore by the old town well. The present-day Coca-Cola plant in Atlanta, which is open to visitors, makes the syrup that supplies soda fountains and bottling plants throughout the Southeast.

## BALTIMORE, MD.

Incorporated as city: 1797.

Mayor: Thomas D'Alessandro, Jr. (May, 1955).

1940 population & (rank): 859,100 (7).

1950 population & (rank): 949,708 (6).

1940-50 population change: +10.5%.

1940 area: Land, 78.7 sq. mi.; inland water, 6.9.

Altitude: Highest, 490 ft.; lowest, sea level.

Location: On Patapsco River, about 12 mi. from Chesapeake Bay.

County: Independent city.

Churches: Roman Catholic, 72; Jewish, 57;

Protestant and other, 482 (150 colored).

City-owned parks: 143 park areas and tracts (6,000 ac.).

Telephone subscribers (April 1, 1954): 220,404.

Radio stations: AM, 8; FM, 3.

Television stations: 3.

Assessed valuation (1954): \$2,846,002,039.

City tax rate (1954): \$2.82 per \$100.

Net bonded debt (Jan. 1 1954): \$204,296,951.

Revenue (1953 budget): \$134,053,050.

Expenditure (1953 budget): \$126,151,948.

Baltimore's fine harbor has made it the second port of the United States in foreign shipping tonnage. It has been an important port since the days of sailing vessels, and also a ship-building center. The Baltimore clipper was one of the best sailing ships of its day and was used extensively in trade.

One of the major industrial centers of the U. S., Baltimore is noted for the diversity of its factory output and for its prominence in many individual lines of manufacture. The city carries on a large wholesale and jobbing trade, is an important banking and financial community, and is a leader in the writing of casualty insurance and fidelity and surety bonds.

Baltimore is the home of the internationally famous Johns Hopkins Hospital and

Medical School and the University of Maryland Hospital and Medical School, two of the nation's best known medical institutions. The University of Maryland Dental School (oldest dental school in the world, founded in 1840) also is located in Baltimore.

Among the historical landmarks in the state is Ft. McHenry, whose shelling by the British in 1814 inspired Francis Scott Key's "The Star-Spangled Banner." It has been restored to its appearance in the early nineteenth century with officers' kitchen and mess rooms containing replicas of the artillery pieces used in 1812. The E. Berkeley Bowle collection of firearms is there, together with furniture of the period and a flag exhibit. It is open to the public.

In addition to its pioneer history in shipping, Baltimore was the home of the pioneer railroad in the United States—the Baltimore and Ohio—and the first railroad passenger and freight station, erected in 1830.

## BIRMINGHAM, ALA.

Incorporated as city: 1871.

Mayor: James W. Morgan (Nov., 1957).

1940 population & (rank): 267,583 (35).

1950 population & (rank): 326,027 (34).

1940-50 population change: +21.8%.

1952 area: Land, 65.32 sq. mi.; inland water, 0.1.

Altitude: Highest, 1,052 ft.; lowest, 565.

Location: In N central part of state.

County: Seat of Jefferson Co.

Churches: Protestant, 491; Roman Catholic, 26; Jewish, 3.

City-owned parks: 60 (1,400 ac.).

Telephones (1953): 139,660.

Television sets (1953): 167,000.

Radio stations: AM, 9; FM, 3.

Television stations: 2.

Assessed valuation (1953): \$358,972,529.

City tax rate (1952): \$18 per \$1,000.

Net bonded debt (Dec. 31, 1953): \$14,084,280.

Revenue (1953): \$19,650,726.

Expenditure (1953): \$20,530,802.

Pioneer Southern aristocrats once lived in the heart of Birmingham, but the tide of commerce has swept over the city in the last half century. The beautiful residential districts and the stately homes have now moved to the hills south of the city. For Birmingham, a vigorous industrial city, named after England's great steel-making city, in less than a century has become the iron and steel capital of the South. Huge steel mills and blast furnaces utilize the three natural resources—coal, iron ore and limestone—that are needed for steel. All are produced in the vicinity.

Other products of Birmingham's industries are heavy machinery, cement, freight cars, stoves, textiles. From Red Mountain, just southeast of the city, one can look down on the spectacular sight of flaming blast furnaces that light up the city and Jones Valley. In Vulcan Park, on US 31, at the top of Red Mountain, stands the iron statue of Vulcan, god of fire, created by Giuseppe Moretti from pig iron produced in the Birmingham area. The statue stands 53 ft. high on a 120-ft. pedestal and weighs 60 tons.



**BOSTON, MASS.**

Incorporated as city: 1822.

Mayor: John B. Hynes (Jan. 1956).

1940 population & (rank): 770,816 (9)

1950 population & (rank): 801,444 (10).

1940-50 population change: +4.0%.

1940 area: Land, 46.1 sq. mi.; inland water, 19.8.

Altitude: Highest, 330 ft.; lowest, sea level.

Location: On Massachusetts Bay, at mouths of Charles and Mystic Rivers.

County: Seat of Suffolk Co.

Churches: Protestant, 183; Roman Catholic, 73; Jewish, 40; others, 74.

City-owned parks & parkways: 3,250.09 ac.

Telephones: 307,697.

Radio sets (Greater Boston Area): 870,000.

Television sets (Greater Boston area): 911,256.

Radio stations: AM, 8; FM, 6.

Television stations: 2.

Assessed valuation (1953): \$1,565,666,000.

City tax rate (1953): \$70.70 per \$1,000.

Net bonded debt (1953): \$65,362,083.

Revenue (1953): \$191,402,627.

Expenditure (1953): \$177,467,030.

No city in the U. S. is richer in historical associations than Boston, and no city has retained more of its original buildings as memorials to America's past.

Puritans from England settled at Boston in 1630, only ten years after the Pilgrims had landed at Plymouth in 1620. Fourteen years later, the pioneer Bostonians set aside the first public park in the U. S.—the Boston Common—for use as a "cow pasture and training field." The poet Emerson took his mother's cow there to graze. But certain people did not enjoy the Boston Common, because they were put in the stocks for profaning the Sabbath and other errant ways.

Fifteen years after the original settlement of Boston, the first free public school in America was opened in 1635. Today Boston and Cambridge (across the Charles River) not only have Harvard University, but also nine other prominent institutions of higher learning.

Following are some of the historic places still extant in Boston which recapitulate the city's great place in the annals of America:

(1) The Old State House, built in 1713 on the site of the first Town House (1658). In front of it occurred the Boston Massacre (1770) in which British troops fired on a mob of citizens, killing six and fanning the flames of revolt. A few years later the Declaration of Independence was proclaimed from the balcony.

(2) The Old South Meeting House, erected first in 1669 and rebuilt in 1729. Here Boston citizens gathered to decide the fate of the hated tea tax imposed by the British. The "Boston Tea Party" followed in 1773, and the British Parliament retaliated by closing the port. Two years later the British attempted to seize the colony's military stores at nearby Concord. In order to thwart the seizure, Paul Revere made his famous ride that opened the Revolutionary War.

(3) Paul Revere House is the oldest house in Boston, built about 1660 and bought by Paul Revere in 1770. It is now restored and furnished as it was in the days of Revere.

(4) The Old North Church (1723), which is the oldest church building in Boston. Signal lanterns were displayed in the steeple to warn Paul Revere of the approach of the British.

(5) Faneuil Hall, the "Cradle of Liberty," which was the scene of stirring mass meetings during the revolutionary movement, and which was used by British officers as a theater during the occupation of the city. It now has historical paintings and a military museum.

Today Boston is the largest market of the shoe and leather industries in the world and also the largest wool market and the greatest fishing port in the U. S.

**BUFFALO, N. Y.**

Incorporated as city: 1832.

Mayor: Steven Pankow (Jan., 1958).

1940 population & (rank): 575,901 (14).

1950 population & (rank): 580,132 (15).

1940-50 population change: +0.7%.

1940 area: Land, 42.67 sq. mi.; inland water, 10.8.

Altitude: Highest, 680 ft.; lowest, 571.

Location: At east end of Lake Erie, on Niagara River.

County: Seat of Erie Co.

Churches: Protestant, 268; Roman Catholic, 82; Jewish, 16; others, 34.

City-owned parks: 10 large (1,137 ac.), 41 minor (116 ac.).

Telephones (April 1954): 293,839.

Radio sets: 323,942.

Television sets: 130,258.

Radio stations: AM, 6; FM, 4.

Television stations: 2.

Assessed valuation (1954): \$1,018,780,980.

City tax rate (1954): \$29.265 per \$1,000.

Bonded debt (1954): \$38,851,783.

Revenue (1952-53): \$55,646,687.

Expenditure (1952-53): \$55,646,687.

The first ship to sail the Great Lakes—the *Griffin*—was built near the present site of Buffalo by La Salle in 1679. Buffalo was still a relatively small town in 1813 when the British captured it and set its homes and buildings afire. Two years later, the town was rebuilt, and it began to thrive with the coming of the Erie Canal.

Today, Buffalo is the leading inland port of the U. S. in terms of the value of its commerce. The Great Lakes steamers connect it with Chicago and Duluth; and ships of foreign nations frequently visit its harbor. In addition, it is the second largest railroad center in the U. S. Both by water and by rail, Buffalo is a geographical middleman between the Midwest and the East. Much of the grain of the Midwest moves through the city, which can store in its elevators 57 million bushels of grain, chiefly wheat. This flow of wheat has made Buffalo the leading flour-milling and feed-manufacturing city in the world. Over 14 million barrels of flour are milled each year.

Buffalo is the twelfth largest U. S. city in manufacturing according to the 1947 Census of Manufactures, and the industrial area is eleventh in value added by manufacture.

Adjoining Buffalo is Niagara Falls, which

for generations has been the favorite scenic spot of honeymooners. The Niagara River is divided by Goat Island and plunges over the escarpment in two parts: the American Falls, 167 feet high, and the Canadian Falls, 158 feet high.

## CHICAGO, ILL.

Incorporated as city: 1837.

Mayor: Martin H. Kennelly (Apr., 1955).

1940 population & (rank): 3,396,808 (2).

1950 population & (rank): 3,620,962 (2).

1940-50 population change: +6.6%.

1942 area: Land, 208.3 sq. mi.; inland water, 4.6.

Altitude: Highest, 665 ft.; lowest, 581.

Location: On lower west shore of Lake Michigan.

County: Seat of Cook Co.

Churches: Protestant, 1,725; Roman Catholic, 299; Jewish, 170.

City-owned parks: 300 (8,557 ac.).

Telephones (June 18, 1954): 1,608,844.

Radio sets (June 1, 1954): 2,315,630.

Television sets (June, 1954): 1,375,929.

Radio stations: AM, 25; FM, 22.

Television stations: 4.

Assessed valuation (1953): \$8,703,232,406.

City tax rate (1953): \$3.616 per \$100.

Gross bonded debt (1953): \$443,033,700.

Revenue (1953): \$569,652,289.

Expenditure (1953): \$543,440,613.

The first white men known to have visited Chicago were Joliet and Marquette in 1673. Fort Dearborn, a blockhouse and stockade, was built in 1804, but was evacuated in 1812, with more than half of its garrison massacred at what is now the foot of 18th Street. Not until 1830 was the town laid out. Forty-one years later it was destroyed by fire.

Chicago today is the greatest slaughtering and meat-packing center in the world. Visitors to the Union Stock Yards can go on tours through the Armour plant and the Swift plant. Chicago also is one of the major grain-trading centers. There is a visitors' gallery overlooking the trading floor in the Chicago Board of Trade building, which is 44 stories and has an observatory 524 feet above the street. The Merchandise Mart, which covers two square blocks, is the second largest office building in the world, exceeded only by the Pentagon in Washington. Tours are conducted daily in which visitors can see showrooms of leading manufacturers of home goods. The city's factories turn out agricultural implements, electrical machinery and railway cars, among many other products.

Chicago stretches along the shore of Lake Michigan for 29.7 miles, and has many beaches and lake shore parks. The Chicago Natural History Museum ranks among the world's foremost museums of anthropology, botany, zoology and geology.

## CINCINNATI, OHIO

Incorporated as city: 1819.

Mayor: Edward N. Waldvogel (Nov., 1955).

City Manager: C. A. Harrell (Apptd. 1954).

1940 population & (rank): 455,610 (17).

1950 population & (rank): 503,998 (18).

1940-50 population change: +10.6%.

1954 land area: 76.09 sq. mi.

Altitude: Highest, 960 ft.; lowest, 441.

Location: In SW corner of state on Ohio River.

County: Seat of Hamilton Co.

Churches: 505.

City-owned parks: 85 (3,734.17 ac.).

Telephones (1953): 309,587\*.

Families with radios (1953): 158,950.

Families with television (1953): 201,000\*.

Radio stations: AM, 10; FM, 2.

Television stations: 3.

Assessed valuation (1954): \$1,275,000,000.

City tax rate (1954): \$10.66 per \$1,000.

Bonded debt (1953): \$111,618,933.

Revenue (1953): \$36,919,536.

Expenditure (1953): \$34,556,858.

\* Data for Hamilton County.

Cincinnati began life in 1788 as a small settlement called Losantiville, perched on a plateau above the Ohio River. Its strategic location in the Western Territory led to the building of Fort Washington, the most ambitious military establishment in the territory. The community that grew up around the fort was named Cincinnati, after the Society of the Cincinnati, whose name stemmed from Roman times.

The first legislature of the Northwest Territory met here in 1799 and elected as its delegate to Congress William Henry Harrison, who later became President of the U. S. A much later President, William Howard Taft, was born in Cincinnati. The Taft Museum, which is open to the public every day, serves as a reminder of the family's role in the city's prominence. It contains an art collection donated by Mr. and Mrs. Charles P. Taft.

Cincinnati's industrial concerns include the Proctor and Gamble Soap Company, the Crosley Division of Avco, General Electric, General Motors, the Ford Motor Company, the Cincinnati Milling Machine Company, the Gruen Watch Company, and the United States Playing Card Company, the largest establishment of its kind in the world.

## CLEVELAND, OHIO

Incorporated as city: 1836.

Mayor: Anthony J. Celebrezze (Nov., 1955).

1940 population & (rank): 878,336 (6).

1950 population & (rank): 914,808 (7).

1940-50 population change: +4.2%.

1940 area: Land, 73.1 sq. mi.; inland water, 0.

Altitude: Highest, 865 ft.; lowest, 573.

Location: On Lake Erie at mouth of Cuyahoga River.

County: Seat of Cuyahoga Co.

Churches: Protestant, 377; Roman Catholic, 118; Jewish, 36; others, 6.

City-owned parks: 35 (2,420 ac.).

Telephones (Mar., 1954): 673,429\*.

Radio sets (1954): 1,212,500.

Television sets (1954): 1,089,860†.

Radio stations: AM, 8; FM, 7.

Television stations: 3.

Assessed valuation (1953): \$2,355,000,000.

City tax rate (1953): \$31.30 per \$1,000.

Bonded debt (1954): \$162,082,500.

Revenue (1953): \$108,955,559.

Expenditure (1953): \$89,991,031.

\* Metropolitan area. † Greater Cleveland.



The largest city in Ohio and seventh in the U. S., Cleveland was founded in 1796 by General Moses Cleaveland, who was the head surveyor of the Connecticut Land Company. This company had bought three million acres in what is now northern Ohio, paying 40 cents an acre. An acre in downtown Cleveland today would bring some \$2,000,000.

Cleveland is an important Great Lakes shipping point and the site of iron and steel manufacturing. Other products include paints, varnishes, electrical appliances, chemicals, and automobile and airplane parts.

In addition to industry, Cleveland is interested in cultural developments. It has the only municipally owned and operated dramatic project in the country—Cain Park Theatre, in suburban Cleveland Heights, having its season in summer and early autumn. The Cleveland Orchestra, which is nationally known, gives informal pop concerts in the summer and a regular series of concerts in the winter.

In the Cleveland Cultural Gardens, a mile-long strip of park area, more than thirty nationality groups represented in Cleveland's population are creating gardens as memorials to peace.

## COLUMBUS, OHIO

Incorporated as city: 1834.

Mayor: M. E. Sensenbrenner (Dec. 1955).

1940 population & (rank): 306,087 (26).

1950 population & (rank): 375,901 (28).

1940-50 population change: +22.8%.

Altitude: Highest, 900 ft.; lowest, 612.

Location: In central part of state, on Scioto River.

County: Seat of Franklin Co.

Churches: Protestant, 361; Roman Catholic, 37; Jewish, 6.

City-owned parks: 1,490 ac.

Telephones (1954): 236,890.

Radio sets (1952): 119,123.

Television sets (1954): 153,387.

Radio stations: AM, 7; FM, 1.

Television stations: 3.

Assessed valuation (1954): \$780,000,000.

City tax rate (1952): \$20.00 per \$1,000.

Bonded debt (1953): \$35,028,632.

Revenue (1953): \$9,605,695.\*

Expenditure (1953): \$9,531,155.\*

\* Figures are for the operation of the city; known as "General Fund."

The site of the present Columbus, which is near the center of Ohio, was selected for the state capital by the General Assembly in 1812. At that time the only settlement was a village, Franklinton, across the Scioto River on its west bank. The village had been founded in 1797 by Lucas Sullivan, a Virginia surveyor. It was merged with Columbus in 1834.

From those beginnings, Columbus has developed into a center of manufacturing, in some aspects of which it has become pre-eminent throughout the world. No city makes so much concrete-mixing machinery, and no city in the U. S. so much mining machinery. Columbus sends oil-well derricks and structural metal to nearly every country in the world, and it leads in the production

of oil cloth, with nearly 81 miles a day. Among other products are shoes, railroad cars and airplanes.

Ohio State University is one of the famous cultural (and football) centers. Its museum houses the Ohio State Archaeological and Historical Society with a fine collection of historical items, as well as natural history and mineralogical specimens. Columbus has one of the leading zoos in the Middle West.

## DALLAS, TEX.

Incorporated as city: 1871.

Mayor: R. L. Thornton (May 1955).

City Manager: Elgin E. Cruil (apptd. 1952).

1940 population & (rank): 294,734 (31).

1950 population & (rank): 434,462 (22).

1940-50 population change: +47.4%.

1954 area: Land, 181,408 sq. mi.; inland water, 1.2.

Altitude: Highest, 688 ft.; lowest, 400.

Location: In NE part of state, on Trinity River.

County: Seat of Dallas Co.

Churches: 487.

City-owned parks: 92 (6,036 ac.).

Telephones: 289,726.

Radio sets: 220,790.

Television sets: 181,000.

Radio stations: AM, 8; FM, 3.

Television stations: 2.

Assessed valuation: \$948,209,290.

City tax rate: \$2.15 per \$100.

Net bonded debt (May 1, 1954): \$89,528,774.

Revenue (1953-54): \$43,507,232.

Expenditure (1953-54): \$43,507,232.

The Dallas Cotton Exchange handles about two million bales of cotton a year in normal times. The city produces more cotton gins than any other city in the world. Dallas is the nation's 3rd largest insurance center.

Dallas is also pre-eminent in the production of saddlery and harness and leather goods, and ranks third in the distribution of farm implements.

The Fair Park in East Dallas, is a \$30-million permanent exposition plant, open as a city park. It is the home of the annual State Fair. Its Hall of State is a shrine to Texas heroes and contains two of the world's largest murals.

Dallas is also the home of the fourth largest aquarium in the U. S., the 78,500-capacity Cotton Bowl and many other cultural and amusement sites.

## DENVER, COLO.

Incorporated as city: 1861.

Mayor: Quigg Newton (June, 1955).

1940 population & (rank): 322,412 (24).

1950 population & (rank): 415,786 (24).

1940-50 population change: +29.0%.

1954 area: Land, 69.7 sq. mi.; inland water, 0.8.

Altitude: Highest, 5,470 ft.; lowest, 5,130.

Location: In NE central part of state, on South Platte River.

County: Coextensive with Denver Co.

Churches: Protestant, 292; Roman Catholic, 40; Jewish, 12.

City-owned parks: 65 (798.9 planted ac.).

City-owned mountain parks: 27 (13,447.6 ac.).



Families with telephones (1953): 150,869.  
 Families with radios: Not available.  
 Television sets: Not available.  
 Radio stations: AM, 7; FM, 3.  
 Television stations: 4  
 Assessed valuation (1953): \$381,779,700.  
 City tax rate (1953): \$42.50 per \$1,000.  
 Bonded debt (1953): \$13,055,000.  
 Revenue (1953): \$32,323,259.  
 Expenditure (1953): \$32,096,331.

\* Metropolitan area.

A traveler going west across the U. S. crosses the great plains and comes upon Denver lying just at the foot of the Rocky Mountains. The city was born in 1858 when gold was discovered in the sands of Cherry Creek.

Denver now is the cultural and transportation center of a vast Rocky Mountain region. Its important industries include meat packing plants, flour mills and factories making tires, saddlery and porcelain.

No other city in the country has such a magnificent system of mountain parks. The nearest is 13 miles from the city, and the farthest limit of the park system extends 50 miles to the west. The main circle drive winds up Lookout Mountain to the top where the rock tomb of Buffalo Bill is situated, along with the Cody Museum.

The most spectacular view of the region is obtainable from Mount Evans, 14,260 feet, which is reached by a scenic drive that is the highest automobile road in North America. Other drives through some of the grandest scenery of the Rockies are to Colorado Springs, to the south, and to Estes Park, which is the eastern entrance to Rocky Mountain National Park.

## DES MOINES, IOWA

Incorporated as city: 1857.  
 Mayor: Joseph J. Van Dreser (Apr. 1955).  
 City Manager: Leonard G. Howell (Apptd. 1950).  
 1940 population & (rank): 159,819 (55).  
 1950 population & (rank): 177,965 (53).  
 1940-50 population change: +11.3%.  
 1953 area: Land, 54.856 sq. mi.; inland water, 0. Altitude: 861 ft.  
 Location: In south central part of state, at junction of Raccoon and Des Moines Rivers.  
 County: Seat of Polk Co.  
 Churches: Protestant, 192; Roman Catholic, 13; Jewish, 4; Greek, 1.  
 City-owned parks: 59 (1,618.94 ac.).  
 Telephones (1954): 99,500.  
 Radio sets: 128,960.  
 Television sets: 56,000.  
 Radio stations: AM, 6; FM, 4.  
 Television stations: 1  
 Assessed valuation (1954): \$201,939,800.  
 City tax rate (1954): \$27.557 per \$1,000.  
 Bonded debt (Jan. 1, 1954): \$10,241,800.  
 Revenue (1953): \$9,386,474.  
 Expenditure (1953): \$10,001,259.

Des Moines sits at the heart of a prairie state, Iowa, which has more land under cultivation, in proportion to its area, than any other state. More corn is produced in Iowa than in any other area of equal size in the

world—one-fifth of the corn crop of the U. S. More hogs are raised in Iowa than in any other state, and Iowa is second only to Texas in the number of cattle.

Des Moines, the home of 51 home insurance companies, and the location of more than 100 state, district or regional offices of other insurance companies, is known as the insurance center of the west. More than 5,000 people are engaged in the insurance business in Des Moines.

Des Moines manufacturing plants produce over 500 different products valued at more than \$330,000,000 annually and sold throughout the world. These products include: cosmetics; chemicals; medicines; wearing apparel, including hosiery, gloves, caps and sports goods; tools; machinery; automobile accessories; tires; food products; agricultural equipment; airplane parts and many others.

Although Iowa as a whole is agricultural, Des Moines is surrounded by rich coal fields on both sides of the Des Moines River. The coal has contributed to the industrial development of the city, which has almost 300 manufacturing plants.

## DETROIT, MICH.

Incorporated as city: 1824.  
 Mayor: Albert E. Cobo (Jan., 1958).  
 1940 population & (rank): 1,623,452 (4).  
 1950 population & (rank): 1,849,568 (5).  
 1940-50 population change: +13.9%.  
 1940 area: 137.9 sq. mi.; inland water, 4.1. Altitude: Highest, 685 ft.; lowest, 574.  
 Location: In SE part of state, on Detroit River.  
 County: Seat of Wayne Co.  
 Churches: Protestant, 1,000; \* Catholic, 188; Jewish, 38.  
 City-owned parks: 338 (5,733 ac.).  
 Telephones: 969,600.  
 Radio sets: 95,000.  
 Television sets: 1,144,000.  
 Radio stations: AM, 6; FM, 7.  
 Television stations: 3.  
 Assessed valuation (1954): \$4,742,384,390.  
 City tax rate (1954): \$22.194 per \$1,000.  
 Net bonded debt (July 31, 1953): \$280,597,000.  
 Revenue (1953): \$294,056,104.†  
 Expenditure (1953): \$282,742,112.†

\* Metropolitan area. † Excludes school system.

Detroit is the oldest city of any size west of the seaboard colonies, having been founded in 1701, more than a century before Chicago was founded. The French were the settlers, and they gave the city its name from their word meaning "strait." They referred to the 27-mile-long Detroit River which connects Lake Erie and Lake St. Clair. The river forms part of the international boundary, and marks the only point where Canada lies directly south of U. S. territory.

Because of its strategic location, Detroit was fought over by the French, the British and the Indians. During the Revolutionary War, it served as headquarters for the British forces in the Northwest. The first steam vessel, the *Walk-in-the-Water*, made its appearance on the Great Lakes in 1818, and Detroit was the western terminus for most of its voyages from Buffalo. Today hundreds of ships, carrying the immense com-

merce of the Great Lakes, call at Detroit and link it by water to all the important cities on the Great Lakes. Detroit ranks fourth in the U. S. as an exporting port.

No other city in the world equals Detroit as an automobile-manufacturing center. The plants include Ford, General Motors, Hudson, Packard, Chrysler and Kaiser-Frazer. Most plants are open for public tours. Apart from automobiles, Detroit manufactures a wide range of products—adding machines, pharmaceuticals, steel barrels, etc.

Belle Isle, a thousand-acre park, is located in the Detroit River.

## HARTFORD, CONN.

Incorporated as city: 1784.

Mayor: Dominick J. DeLuco (Dec. 1955).

City Manager: Carleton F. Sharpe (Apptd. 1948).

1940 population & (rank): 166,267 (51).

1950 population & (rank): 177,397 (54).

1940-50 population change: +6.7%.

1940 area: Land, 17.4 sq. mi.; inland water, 1.2.

Location: In central part of state, on Connecticut River.

County: Seat of Hartford Co.

Churches: Protestant, 94; Roman Catholic, 14; Jewish, 6.

City-owned parks: 29 (2,800 ac.).

Telephones (1953): 143,745\*.

Radio stations: AM, 6; FM, 2.

Television stations: None.

Assessed valuation (1954): \$543,064,340.

City tax rate (1954): \$38 per \$1,000.

Net bonded debt (Mar. 31, 1954): \$15,766,010.

Revenue (1954): \$24,426,848.

Expenditure (1954): \$23,908,653.

\* Hartford Exchange Area.

A Dutch trading post, established in 1623, was the beginning of Hartford. Thirteen years later, English colonists from Cambridge, Mass., started a permanent settlement and soon afterward made it the capital of the Colony of Connecticut.

The Dutch were expelled from Connecticut in 1654, but Hartford's troubles were not over. In 1687, the Governor of New York appeared at Hartford and demanded the Connecticut charter, on the grounds that he was Governor General of New England, too. The charter was hidden in a hollow oak tree for two years until King William III recognized it as valid.

By now, Hartford has become the greatest insurance center in the nation: 48 companies have their headquarters there, and their combined assets exceed \$3 billion. In addition, Hartford is the home of the largest type-writer manufacturers in the world—Underwood and Royal. Its chief newspaper, *The Hartford Courant*, is the oldest in America; an earlier subscriber was George Washington.

Historical treasures are kept in the State Library and Supreme Court Building. Among them are a full-length portrait of Washington by Gilbert Stuart; the original charter signed by Charles II; the Brandegee collection of portraits of U. S. Justices; and the Joseph C. Mitchelson collection of coins, bills and commercial tokens.

## HONOLULU, HAWAII

Established as City and County of Honolulu: 1907.

Mayor: John H. Wilson (Jan. 1955).

1940 population of City and County: 257,664.

1950 population of City and County: 353,020.

1940-50 population change: +36.7%.

1954 area of City and County: 604 sq. mi.

Altitude: Highest, 4,025 ft.; lowest, sea level.

Location: Entire island of Oahu.

Churches: Roman Catholic, 24; Buddhist, 14;

Jewish, 1; Protestant and other, 67.

City-owned parks: 108 (2,197 ac.).

Telephones (1953): 100,265.

Radio sets (1953): 100,000.

Television sets (1953): 19,000.

Radio stations: AM, 7; FM, 2.

Television Stations: 3.

Assessed valuation (1954): \$504,434,065.

City tax rate (1953): \$16.25 per \$1,000.

Bonded debt (1954): \$27,031,000.

Revenue (1953 est.): \$23,339,113.

Expenditure (1953 est.): \$23,188,397.

Honolulu's early history was one of turbulence and conflict. One of the last areas on the globe to be discovered and exploited, Hawaii was subject to strong pressures from every world power, from American missionaries who arrived in 1820, and from the opportunism of whalers. These whalers built Honolulu originally, bringing trade, commerce and prosperity that led to expansion into the present basic industries of sugar and pineapple.

As early as 1814, Russia tried to move in, and the city's downtown shopping area now centers around Fort St., which takes its name from the bastion Russian soldiers built at the harbor's edge. The British flag was raised in 1843 and French forces occupied Honolulu in 1849. Each time control was given back to the independent kingdom without bloodshed. In 1898, a group of Americans completed a project attempted at intervals during the previous 65 years—annexation to the U. S.

Modern Honolulu is a center of Pacific communications and its airport, since the start of the Korean War, has ranked with the world's largest from the point of view of traffic. Oahu is the scene of important defense installations, famed Pearl Harbor and Schofield barracks, but its relation with the U. S. government is not one-sided. Hawaii taxpayers pay in excess of \$100,000,000 a year in federal taxes, a factor that weighs strongly in their continued plea for statehood and a voice as to how this money shall be spent.

## HOUSTON, TEX.

Incorporated as city: 1837.

Mayor: Roy Hofheinz (Jan., 1955).

1940 population & (rank): 384,514 (21).

1950 population & (rank): 596,163, (14).

1940-50 population change: +55.0%.

1950 area: Land, 160 sq. mi.; inland water, 0.

Altitude: Highest, 74 ft.; lowest, sea level.

Location: In SE part of state, near Gulf of Mexico.

County: Seat of Harris Co.

Churches: Over 500.  
 City-owned parks: 91 (3,372.60 ac.).  
 Telephones (1953): 343,914.  
 Radio sets: 350,000.  
 Television sets: 85,000.\*  
 Radio stations: AM 8; FM, 3.  
 Television stations: 1  
 Assessed valuation (1951): \$996,527,000; (1952 est.): \$1,060,000,000.  
 City tax rate: \$1.975 per \$100.  
 Bonded debt (1950): \$73,394,422.  
 Revenue (1951): \$20,875,362.  
 Expenditure (1951): \$23,995,086.  
 \* Metropolitan area.

Sam Houston was the commander in chief of the Texas troops who fought a successful war of rebellion against domination by Mexico, which had been in possession of Texas. On April 21, 1836, Houston's men won a decisive victory in which the Mexican general, Santa Anna, was taken prisoner, and signed the treaty which launched the Republic of Texas. In September, a constitution was ratified, and Houston was elected President. The Texas Republic was recognized by the U. S. and by the major European powers.

The present city of Houston, which is the largest in Texas and the entire South, honors Sam Houston, who was president of the erstwhile republic. This was its first capital. Today great industrial establishments line Houston's ship channel. A leading export center, Houston leads all others in America in cotton exports. It is one of America's outstanding oil-producing and refining centers, and leads the world in the manufacture and distribution of oil-industry equipment. Among the new industries that are being developed in Houston are synthetic rubber and chemicals.

Houston is the second-largest port in the nation from the standpoint of tonnage handled.

## INDIANAPOLIS, IND.

Incorporated as city: 1874.  
 Mayor: Alex M. Clark (Dec., 1955).  
 1940 population & (rank): 386,972 (20).  
 1950 population & (rank): 427,173 (23).  
 1940-50 population change: +10.4%.  
 1954 area: Land, 57.23 sq. mi.; inland water, 0.1.  
 Altitude: Highest, 816 ft.; lowest, 667.  
 Location: In central part of state, on West Fork of White River.  
 County: Seat of Marion County.  
 Churches: 515.  
 City-owned parks: 32 (3,519 ac.).  
 Telephones (May 1954): 247,055.  
 Radio sets: 135,780 (radio families).  
 Television sets: 90,000.  
 Radio stations: AM, 5; FM, 1.  
 Television stations: 2.  
 Assessed valuation (1953): \$708,893,550.  
 City tax rate (1953): \$5.785 per \$100.  
 Gross debt (Dec. 31, 1953): \$36,122,155.\*  
 Revenue (1952): \$30,202,029.†  
 Expenditure (1952): \$28,558,848.†

\* Total overlapping debt for all governmental units in Indianapolis. † Civil city purposes, only.

Indianapolis is the second largest city in the U. S. which is not on navigable water.

Its size and extensive trade is based on the rich territory surrounding it. The cornfields of the region make Indianapolis the second corn market in the United States. There are also in the region large coal fields and deposits of building stone and marl.

The Indianapolis Motor Speedway, five miles from the center of the city, was built in 1909 as a proving ground for automobiles. Each Memorial Day a 500-mile race is held there. Various well-known improvements in automobiles are credited to the experience gained on the speedway. Among them are the rear-vision mirror, the balloon tire and ethyl gasoline.

The homes of two famous citizens of Indianapolis are preserved as memorials. One is the home of James Whitcomb Riley, which is preserved as it was when the famous Hoosier poet lived there. The other is the home Benjamin Harrison built in 1872. He lived there except for the period of his service as United States Senator, and as the twenty-third President of the United States. Much of the furniture is original.

## JERSEY CITY, N. J.

Incorporated as city: 1855.  
 Mayor: Bernard J. Berry (Dec. 1957).  
 1940 population & (rank): 301,173 (30).  
 1950 population & (rank): 299,017 (37).  
 1940-50 population change: -0.7%.  
 1940 area: Land, 14.3 sq. mi.; inland water, 7.2.  
 Altitude: Highest, 180 ft.; lowest, sea level.  
 Location: In NE part of state, on Hudson River and Upper New York Bay.  
 County: Seat of Hudson Co.  
 Churches: Protestant, 96; Roman Catholic, 39; Jewish, 17; Others, 45.  
 Telephones: 83,876.  
 Radio stations: None.  
 Television stations: None.  
 Assessed valuation (1954): \$492,920,162.  
 City tax rate (1954): \$84.32 per \$1,000.  
 Bonded debt (Dec. 31, 1953): \$44,025,443.\*  
 Revenue (1953): \$46,363,176.  
 Expenditure (1953): \$47,224,660.

\* Includes bonds and notes authorized and not issued of \$3,140,863.

## LOS ANGELES, CALIF.

Incorporated as city: 1850.  
 Mayor: Norris Poulson (June 30, 1957).  
 1940 population & (rank): 1,504,277 (5).  
 1950 population & (rank): 1,970,358 (4).  
 1940-50 population change: +31.0%.  
 1953 population: 2,104,663.  
 1954 area: Land, 453.898 sq. mi.; inland water, 2.6.  
 Altitude: Highest, 5,081 ft.; lowest, sea level.  
 Location: In SW part of state, on Pacific Ocean.  
 County: Seat of Los Angeles Co.  
 Churches: 1,715.  
 City-owned parks: 127 (9,537.5 ac.).  
 Telephones (Apr. 1, 1954): 938,189.  
 Radio sets (Jan. 1, 1954): 5,300,000.\*  
 Television sets (Aug. 1, 1954): 1,882,304.\*  
 Radio stations (Jan. 1, 1954): AM, 25; FM, 14.\*  
 Television stations (1953): 8.  
 Assessed valuation (1954-55): \$3,055,936,214.  
 City tax rate (1954-55): \$1.8279 per \$100.



Gross debt (June 30, 1953): \$328,282,000.

Revenue (1953-54): \$331,355,334.

Expenditure (1953-54): \$348,368,553.

\* Metropolitan area.

In 1781, the Mexican Provincial Governor, Filipe de Neve, founded "El Pueblo de Nuestra Señora la Reina de Los Angeles"—meaning "The Village of Our Lady, the Queen of the Angels." The pueblo became the capital of a Mexican province, and it was the last place to surrender to the U. S. at the time of the American occupation in 1847.

Los Angeles now is the largest in population of any city in the West and is the fourth largest in the nation. Geographically, it extends more than 40 miles from the mountains to the sea; and in area, it is the world's largest city. The city's phenomenal growth has been brought about primarily by:

(1) The equable climate, which has attracted people and industry.

(2) Development of the citrus-fruit industry. Orange and other citrus groves extend to the east in a huge arc, reaching a radial depth of more than 30 miles at some points.

(3) Oil fields. Both to the north and to the southeast of Los Angeles, forests of oil derricks proclaim the discovery and exploitation of vast fields of underground wealth.

(4) Development of a man-made harbor. The port of Los Angeles is the world's largest fishing harbor and one of its most prominent ports in tonnage volume.

(5) The motion-picture industry. More than two-thirds of all motion pictures are produced in the metropolitan area.

(6) The aircraft industry has also centered in the Los Angeles area and now leads all other industries in the value of manufactured products.

The climate of the city is reflected in the facilities for open-air living. In Los Angeles, the drive-in cafe and drive-in theater were originated, and Angelenos enjoy sports the year-round and "Symphonies under the Stars" in famed Hollywood Bowl.

Exposition Park has a 7-acre sunken garden containing 15,000 rosebushes of 155 varieties. In the park is the Coliseum, in which the 1932 Olympic Games were held. It seats 101,671 persons and is the home field for the Los Angeles Rams and the U.S.C. and U.C.L.A. football teams.

Adjoining Los Angeles, within a few minutes by bus or car, is Pasadena, famous for its New Year's Day "Tournament of Roses." Also nearby is San Marino, home of the Henry E. Huntington Library and Art Gallery. Beaches within easy driving distance include Venice, Malibu, Hermosa, Redondo, Santa Monica and Long Beach.

## MEMPHIS, TENN.

Incorporated as city: 1826.

Mayor: Frank T. Tobey (Jan. 1956).

1940 population & (rank): 292,942 (32).

1950 population & (rank): 396,000 (26).

1940-50 population change: +35.2%.

1950 area: Land, 121.1 sq. mi.; inland water, 11.6.

Altitude: Highest, 320 ft.; lowest, 195.

Location: In SW corner of state, on Mississippi River.

County: Seat of Shelby Co.

Churches: Roman Catholic, 16; Jewish, 6; Protestant & other, 419.

City-owned parks: 49 (1,889.72 ac.); playgrounds, 45.

Telephones (Apr. 1, 1954): 173,794.

Radio sets (Apr. 1, 1954): 150,126.

Television sets (Apr. 1, 1954): 125,102.

Radio stations: AM, 8; FM, 1.

Television stations: 2.

Assessed valuation (1954): \$660,338,647.

City tax rate (1953): \$1.80 per \$100.

Bonded debt (Dec. 31, 1953): \$38,810,765.

Revenue (1953): \$26,002,597.

Expenditure (1953): \$25,065,638.

One of the country's largest inland ports, Memphis handles more than 4 million bales of cotton a year, making it the biggest single cotton market in the world. It also ranks first in the world as a market for hardwood lumber.

The first settlers of Memphis were the Chickasaw Indians, who had a village named Chisca there on the bluffs overlooking the Mississippi River. Hernando de Soto, in 1541, is said to have had his first glimpse of the Mississippi from the site of Memphis; and in the next century, Joliet and Marquette stopped there to trade with the Indians. La Salle tried to claim the region for France in 1682 and built a fort.

Actually the city was not settled until 1819, after Tennessee had been taken into the Union in 1796. One of the three founders of Memphis was Andrew Jackson. During the Civil War, the federal forces won a gunboat battle on the river at Memphis, and General Sherman was enabled to take the city. Confederate Park today contains ramparts from which Confederate soldiers defended the city against the federal gunboats.

## MIAMI, FLA.

Incorporated as city: 1896.

Mayor: Chelsie J. Senerchia (Nov., 1954).

City manager: Gen. E. A. Evans (apptd. Sept. 1, 1952).

1940 population & (rank): 172,172 (48).

1950 population & (rank): 249,276 (42).

1940-50 population change: +44.8%.

1950 area: Land, 34.19 sq. mi.; inland water, 18.45.

Altitude: Average, 10 ft.

Location: In SE part of state, on Biscayne Bay.

County: Seat of Dade Co.

Churches: 235.

City-owned parks: 48 (613 ac.).

Telephones: 242,800.

Radio sets: 165,000.

Television sets: 125,000.

Radio stations: AM, 6; FM, 4.

Television stations: 1.

Assessed valuation (1952-53): \$585,253,940.

City tax rate (1952-53): \$21.12 per \$1,000.

Bonded debt (1952-53): \$21,718,000.

Revenue (1952-53): \$17,846,651.

Expenditure (1952-53): \$19,600,183.

For the variety and quantity of its sports events, Miami can lay claim to being the most athletic city in the nation. In the matter of fishing, for example, there is a winter tournament that begins about the middle of January and runs through April; then comes a summer tournament that runs from July to early September. There are jai-alai games nightly from Christmas into April. There is greyhound racing on three tracks from December into March.

In case these events are not enough for the thousands of tourists who flock to Miami, there is the Orange Bowl football game on New Year's Day—followed by an open golf tournament—followed by a dinghy regatta—followed by a general sailing regatta in March. And there are horse races at Hialeah Park and Tropical Park from mid-December until April. Hialeah is noted as one of the most beautiful horse-racing tracks in the world, with its cocoanut palms, its tropical gardens, and the largest flock of flamingoes in Florida.

Miami is the southernmost large city on the U. S. mainland. To the south, a unique overseas highway goes down the Florida Keys to Key West, connecting the islands by bridges.

## MILWAUKEE, WIS.

Incorporated as city: 1846.

Mayor: Frank P. Zeldler (April, 1956).

1940 population & (rank): 587,472 (13).

1950 population & (rank): 637,392 (13).

1940-50 population change: +8.5%.

1953 area: Land, 62 sq. mi.; inland water, 0.

Altitude: 581 ft.

Location: In SE part of state, on Lake Michigan.

County: Seat of Milwaukee Co.

Churches: 435.

County-owned parks: 75 (7,500 ac.).

Telephones (Apr. 1, 1954): 356,376.

Radio sets (Apr. 1, 1953): 271,400.\*

Television sets (Jan. 1, 1954): 245,881.\*

Radio stations: AM, 7; FM, 2.

Television stations: 3.

Assessed valuation (1952): \$1,435,773,145.

City tax rate (1952): \$33.38 per \$1,000.

Gross debt (Dec. 31, 1952): \$31,000,873.

Revenue (1953): \$85,070,869.

Expenditure (1954 budget): \$93,732,846.

\* Milwaukee Metropolitan Area.

French missionaries visited the site of Milwaukee in the seventeenth century, but it was not until 1795 that Jacques Vieau established a trading post there. The first permanent white settler, Vieau's son-in-law, Solomon Juneau, made his home there in 1818.

Milwaukee is one of the great industrial centers of the country, producing heavy machinery, electrical equipment, chemicals, food and leather products, etc. It is famous for its breweries, which are open to visitors by appointment. The city-owned harbor is one of the largest and best-equipped on the Great Lakes.

A Wisconsin State Fair, held annually in

August, includes a state art exhibit and automobile and horse racing. The Milwaukee Auditorium is one of the largest exposition buildings in the country, with 8 separate halls under one roof, the smallest seating 300 and the largest 7,200. A new addition provides the most modern arena in America. It has a seating capacity of 12,500 and is equipped with an ice floor for hockey, skating and ice shows.

Of particular note is the Milwaukee County park system with its botanical gardens, zoo and recreational facilities. This is also true of its cultural institutions, including the museum, public library and educational institutions.

## MINNEAPOLIS, MINN.

Incorporated as city: 1867.

Mayor: Eric G. Hoyer (July, 1955).

1940 population & (rank): 492,370 (16).

1950 population & (rank): 521,718 (17).

1940-50 population change: +6.0%.

1954 area: Land, 58.79 sq. mi.; inland water, 5.0.

Altitude: Highest, 945 ft.; lowest, 695.

Location: In SE central part of state, on Mississippi River.

County: Seat of Hennepin Co.

Churches: 465.

City-owned parks: 147.

Telephones (1954): 317,500.

Radio sets (1952): 410,000.

Television sets (1952): 162,100.

Radio stations: AM, 10; FM, 3.

Television stations: 3.

Assessed valuation (1953): \$341,000,000.

City tax rate (1953): \$1.48 per \$100.

Net debt (1953): \$41,771,000.

Revenue (1953): \$61,894,689.

Expenditure (1951): \$52,000,000.

Lieutenant Zebulon Pike made a treaty with the Sioux Indians in 1805-06 by which they ceded to the whites land including the Falls of St. Anthony and the site of Minneapolis. Fort Snelling was built in 1819-20, and in 1823 the government built a lumber and flour mill. Today Minneapolis is one of the outstanding flour-milling centers. Serving a vast agricultural region, the city is the largest distributing center for tractors and farm implements.

Not far from the city on the Mississippi River is U. S. Lock and Dam No. 1, a few miles above which is the head of navigation. From there to St. Louis, a river stretch of 659 miles, 26 dams insure a 9-foot channel for navigation. Minnehaha Park along the Mississippi contains Minnehaha Falls, made famous by Longfellow's poem, *The Song of Hiawatha*. Above the falls is a statue of Hiawatha and Minnehaha.

Minneapolis has 22 lakes within its park system, offering fishing, bathing and sail-boating in the summer, iceboating and skating in the winter. Twelve miles west of the city is Lake Minnetonka, which has 110 miles of shore line. Minneapolis is also the gateway city to the "Land of the 10,000 Lakes."

Across the Mississippi is Minneapolis' "twin city," St. Paul.

## NEW BEDFORD, MASS.

Incorporated as city: 1847.

Mayor: Arthur N. Harriman (Jan. 1956).

1940 population & (rank): 110,341 (80).

1950 population & (rank): 109,189 (96).

1940-50 population change: -1.0%.

1954 population: 104,577.

1950 land area: 19.1 sq. mi.

Altitude: Highest, 181.5 ft.; lowest, sea level.

Location: At mouth of Acushnet River, on arm of Buzzards Bay.

County: One of Bristol Co.'s three seats.

Churches: Protestant, 53; Roman Catholic, 23; Jewish, 3.

City-owned parks: 9 (170 ac.).

Telephones (1954): 45,531.

Radio sets (estimated 1954): 50,000.

Television sets (estimated 1954): 17,500.

Radio stations: AM, 2; FM, 2.

Television stations: None.

Assessed valuation (1953): \$129,949,675.

City tax rate (1953): \$50.80 per \$1,000.

Bonded debt (1954): \$5,944,000.

Revenue (1952): \$18,762,552.

Expenditure (1952): \$18,552,331.

New Bedford is a seaport city. Its location was basic to its present importance as a center of important manufacturing plants, marine yards and a large fishing industry; and to its past leadership as the world's greatest whaling port, memorialized by its Whaling Museum and the venerable Seamen's Bethel described by Herman Melville in *Moby Dick*.

Northeast Airlines service links New Bedford's 1st-class Municipal Airport directly with Boston and New York. Steamships ply from New Bedford to Martha's Vineyard and Nantucket. The city is also central to Cape Cod, Plymouth, Newport, Rhode Island and other tourist and vacation objectives, and adjoins such well-known yachting centers as Marion, Mattapoisett and South Dartmouth.

New Bedford textile plants include the nationally known Wamsutta and Hathaway Mills. A Revere and Brass plant, Acushnet Process Co. (maker of championship golf balls and other rubber products), Continental Screw, Morse Twist Drill, Aerovox Corp. and Cornell Dubilier Electric Corp. are other large-scale industries.

## NEW ORLEANS, LA.

Incorporated as city: 1805.

Mayor: de Lesseps S. Morrison (May, 1958).

1940 population & (rank): 494,537 (15).

1950 population & (rank): 570,445 (16).

1940-50 population change: +15.3%.

1954 population: 619,000.

1954 area: Land, 199.4 sq. mi.; inland water, 164.1.

Altitude: Highest, 15 ft.; lowest, 4 below sea level.

Location: In SE part of state, between Mississippi River and Lake Pontchartrain.

Parish: Seat of Orleans Parish.

Churches: 625.

City-owned parks: 69 (1,700 ac.).

Telephones (1954): 236,000.

Radio sets (1954): 220,000.

Television sets (1952): 60,000.

Radio stations: AM, 11; FM, 4.

Television stations: 2.

Assessed valuation (1953): \$739,116,538.

City tax rate (1952): \$3.15 per \$100.

Bonded debt (May 1, 1953): \$64,196,000.

Revenue (1954 budget): \$23,750,000.

Expenditure (1954 budget): \$23,750,000.

One of the few cities of the nation that have been under three flags, New Orleans has belonged to Spain, France and the U. S. The French founded it in 1718 and named it in honor of the Duke of Orleans.

In 1762, France ceded the city and the territory to Spain. In 1800, the territory was returned to France, but government authorities did not take over until 1803, only 20 days before the region became part of the U. S. in the Louisiana Purchase.

As a memento of the old days, New Orleans has a French Quarter, or Vieux Carré, which has fascination for tourists and for gourmets. The narrow streets are overhung with the iron-trellised balconies of quaint old dwellings and shops. The restaurants are celebrated for their good food.

Six miles below the city is Chalmette National Historical Park, which marks the battlefield on which Andrew Jackson defended New Orleans against the British in 1815. The British suffered 1,971 casualties, while the Americans suffered only 13. It was the last battle fought between the U. S. and Great Britain.

One of the city's historic buildings is the Cabildo, dating back to 1795, which was the headquarters of the Spanish governor. It later was the scene of the transfer of Louisiana from France to the U. S.

The most spectacular and gayest festival in the U. S. is held in New Orleans—the Mardi Gras, which involves a week of carnival and reaches its climax on Shrove Tuesday, the day before the beginning of Lent. On the more serious side, the city is one of the great ports of the U. S., second only to New York in dollar volume of cargo handled.

## NEW YORK, N. Y.

Chartered as "Greater New York": 1898.

Mayor: Robert F. Wagner (Dec. 1957).

Borough Presidents: Bronx, James J. Lyons;

Brooklyn, John Cashmore; Manhattan,

Hulan E. Jack; Queens, James A. Lundy;

Richmond, Edward G. Baker.

1940 population & (rank): 7,454,995 (1).

1950 population & (rank): 7,891,957 (1).

1940-50 population change: +5.9%.

1940 area: Land, 299.0 sq. mi.; inland water, 66.4 sq. mi.

Altitude: Highest, 430 ft.; lowest, sea level.

Counties: Consists of 5 counties: Bronx, Kings (Brooklyn), New York (Manhattan), Queens, Richmond (Staten Island).

Location: SE part of state, at mouth of Hudson River.

Churches: Protestant, 1,418; Jewish, 1,330; Roman Catholic, 525.

City-owned parks: 882 (26,627 ac.).

Telephones: 2,365,000.

Families with radios: 2,258,470.

Television sets: 1,475,000.

Radio stations: AM, 25; FM, 23.

Television stations: 6.

Assessed valuation (1952): \$19,425,499,087.



City tax rate (1952): \$3.22 per \$100.  
 Bonded debt (1952): \$3,352,877,062.41.  
 Revenue (1952): \$1,338,025,754.56.  
 Expenditure (1952): \$1,341,289,846.60.

In 1609, Henry Hudson, who worked for the Dutch East India Company, sailed up the river that now bears his name and went as far as Albany. Five years later, a permanent settlement was established at what is now New York, but it was originally called New Amsterdam by the Dutch governors. One of them, Peter Minuit, was said to have bought Manhattan Island from the Indians for \$24 worth of beads, buttons and trinkets. In 1664, Great Britain's Duke of York sent a fleet which quietly seized the settlement from the Dutch, without bloodshed, and rechristened the colony in honor of the Duke.

Control of New York passed to the young U. S. at the end of the Revolutionary War, and George Washington was inaugurated President in New York's old City Hall. Congress met in New York from 1785 to 1790.

Today New York is the most populous and wealthy city in the U. S. Much of this growth and prosperity is due to New York Harbor, which is one of the finest, and perhaps the busiest, in the world. The port clears more than 5,000 vessels a year and ships almost half of the entire trade of the U. S. For the visitor, perhaps the best view of New York Harbor is from the top of the Statue of Liberty, which is reached by ferry boats running hourly from the Battery, the southern tip of Manhattan. The statue, presented to the U. S. by France in 1885, is the tallest of modern times—152 feet high on a pedestal 151 feet high. An elevator runs to the balcony level, and a spiral stairway leads to the observation platform. Another way to see the harbor and skyline is to take the boat trip around Manhattan.

In lower Manhattan, not far from the Battery, is Wall Street, the financial center of the nation. It was so named from the wall constructed nearly 300 years ago by the Dutch burghers to protect themselves against Indian raids. The New York Stock Exchange admits visitors. By way of contrast, New York's Chinatown, within walking distance of Wall Street to the north, has intriguing things to buy and restaurants with delicious things to eat.

Midtown Manhattan has Broadway, otherwise known as the "Main Stem," or "The Great White Way." More stage plays and motion-picture theaters are crowded in that area than in any comparable area.

Among the most noteworthy buildings, or clusters of buildings, in Midtown Manhattan are:

(1) The Empire State Building, the world's tallest structure, 1,250 feet high. Some half million tourists visit the building every year.

(2) Rockefeller Center—also known as Radio City. It occupies 12 acres and includes 15 buildings. The studios of the National Broadcasting Company can be inspected in tours that start every twenty minutes. The RCA Building has an observation roof.

(3) United Nations Headquarters, which

is located on the East River at 42nd Street.

The many museums of New York City are listed in a separate section (See Museums in the index). The most celebrated is the Metropolitan Museum of Art, one of the world's most famous. On the outskirts of New York City are two of the largest airfields in the world: La Guardia Field and Idlewild. La Guardia Field covers an area of 558 acres, and has observation decks from which one can watch the arrival and departure of domestic and overseas planes.

## NEWARK, N. J.

Incorporated as city: 1836.

Mayor: Leo P. Carlin (July 1, 1958).

1940 population & (rank): 429,760 (18).

1950 population & (rank): 438,776 (21).

1940-50 population change: +2.1%.

1950 area: Land, 23.57 sq. mi.; inland water, 3.2.

Altitude: Highest, 271.4 ft.; lowest, sea level.

Location: In NE part of state, on Passaic River and Newark Bay.

County: Seat of Essex Co.

Churches: Protestant, 159; Roman Catholic, 41; Jewish, 32; others, 57.

City-owned parks: 38 (34.24 ac.).

County-governed parks in city: 7 (755.72 ac.).

Telephones (1952): 230,000.

Radio stations: AM, 4; FM, 3.

Television stations: 1.

Assessed valuation (1954): \$705,818,000.

City tax rate (1954): \$8.55 per \$100.

Net bonded debt (1954): \$41,224,579.

Revenue (1953): \$74,581,668.

Expenditure (1953): \$70,215,009.

## OKLAHOMA CITY, OKLA.

Incorporated as city: 1890.

Mayor: Allen Street (Apr., 1955).

City Manager: Ross Taylor.

1940 population & (rank): 204,424 (42).

1950 population & (rank): 243,504 (45).

1940-50 population change: +19.1%.

1954 area: Land, 57.24 sq. mi.; inland water, 0.

Altitude: Highest, 1,276 ft.; lowest, 1,070.

Location: In central part of state, on North Canadian River.

County: Seat of Oklahoma Co.

Churches: Protestant, about 280; Roman Catholic, 13; Jewish, 2; others, 5.

City-owned parks: 82 (9.924 ac.).

Telephones (1954): 145,404.

Radio stations: AM, 8; FM, 1.

Television stations: 4.

Assessed valuation (1953-54): \$281,666,450.

City tax rate (1950): \$12.782 per \$1,000.

Bonded debt (1950): \$13,918,000.

Revenue (1950): \$8,784,230.64.

Expenditure (1950): \$7,935,758.79.

More than two thousand oil wells are located within the limits of Oklahoma City or close by, some of them more than a mile deep.

Oklahoma City sprang into being almost overnight. In 1889, the government threw open this territory for settlement, and there was a classic rush across the line to stake claims. Within a short time, Oklahoma City was a bustling town of 10,000.

The city now ranks as one of the dozen primary livestock markets in the country. Packing plants and flour mills are among the 600 manufacturing concerns. The city is also an important aviation center, with Tinker Field as an Air-Force materiel depot. There are six privately owned airports in the area surrounding Oklahoma City.

## PHILADELPHIA, PA.

First charter as city: 1701.

Mayor: Joseph Sill Clark, Jr. (Jan., 1956).

1940 population & (rank): 1,931,334 (3).

1950 population & (rank): 2,071,605 (3).

1940-50 population change: +7.3%.

1940 area: Land, 127.2 sq. mi.; inland water, 7.8.

Altitude: Highest, 440 ft.; lowest, sea level.

Location: In SE part of state, at junction of Schuylkill and Delaware Rivers.

County: Seat of Philadelphia Co.

Churches: Roman Catholic, 148; Jewish, 136; Protestant and other, 923.

City-owned parks: 35 (7,499.19 ac.).

Telephones (1953): 862,897.

Television sets (1953): 632,153.

Radio stations: AM, 10; FM, 7.

Television stations: 3.

Assessed valuation (1954): \$3,579,147,622.

City tax rate (1953): \$3.025 per \$100.

Net bonded debt (Jan. 1, 1954): \$473,870,526.

Revenue (1953): \$182,413,165.

Expenditure (1953): \$174,340,722.

Philadelphia, the "City of Brotherly Love," was settled in 1681 by Capt. William Markham, who, with a small band of colonists, was sent out by William Penn. Penn arrived the following year.

In the period before the American Revolution, the city out-stripped all others in the colonies in education, arts, science, industry and commerce. In 1774-76, the First and Second Continental Congresses met in Philadelphia; and from 1781-83, the city was the capital of the U. S. under the Articles of Confederation. In 1790, it became the nation's capital under the Constitution and remained so until the seat of the federal government moved to Washington in 1800.

Today, Philadelphia is the third largest city in the U. S. and one of the great industrial cities of the world, turning out such products as textiles, steel, radios, ships, street cars and many others. Over half the surgical instruments manufactured in the U. S. come from Philadelphia; and the Baldwin Locomotive Plant, largest in the world, is at Eddystone, on the outskirts of the city.

Philadelphia abounds in landmarks of early American history, including Independence Hall, where the famous Liberty Bell is located, and adjacent Congress Hall, where George Washington was inaugurated for his second term.

The City Hall is 547 feet in height and is surmounted by a 37-foot bronze statue of William Penn created by Alexander Milne Calder. The building is the tallest in the city.

Philadelphia's U. S. Mint, established in 1792, was the first in the country.

## PITTSBURGH, PA.

Incorporated as city: 1816.

Mayor: David L. Lawrence (Jan., 1956).

1940 population & (rank): 671,659 (10).

1950 population & (rank): 676,806 (12).

1940-50 population change: +0.8%.

1951 area: Land, 55.23 sq. mi.; inland water, 3.0.

Altitude: Highest, 1,240 ft.; lowest, 715.

Location: In SW part of state, at junction of Allegheny and Monongahela Rivers to form Ohio River.

County: Seat of Allegheny Co.

Churches: Protestant, 778; Roman Catholic, 204; Jewish, 8.

City-owned parks: 20; 9 parklets (1,970 ac.).

Telephones (1953): 436,493.

Radio sets (1953): 421,139.

Television sets (1953): UHF, 2; VHF, 1.

Radio stations: AM, 7; FM, 7.

Television stations: 1.

Assessed valuation (1951): Land, \$409,837,170; buildings, \$618,976,086.

City tax rate (1952): Land, \$33 per \$1,000; buildings, \$16.50 per \$1,000.

Bonded debt (1952): \$54,845,596.

Revenue (1952): \$40,884,751.

Expenditure (1952): \$40,514,514.

No other city in the world produces so much iron and steel as does Pittsburgh. The territory within 30 miles of the courthouse produces one-fifth of the nation's pig iron, one-fourth of its steel and one-fifth of its glass. No other city in the world produces so much aluminum. As though this were not enough, Pittsburgh has the largest cork-manufacturing plant and the largest pickling and preserving business in the world.

A detachment of troops from Virginia put a fort on the site of present Pittsburgh in 1754, considering it a strategic spot. Following the original Virginia settlers, the French seized the spot; and in 1758, the British took it away from the French. The British built a new fort and named it after William Pitt.

Pittsburgh's largest park is Schenley Park, of 422 acres, which is the home of Carnegie Tech and Phipps Conservatory. The Department of Fine Arts of the Carnegie Institute holds a yearly international exhibition of paintings. The Carnegie Museum contains some 5 million objects pertaining to natural sciences, ethnology and the useful arts.

Two flower shows are held annually at Phipps Conservatory and are considered the finest display of their kind in the U. S.

## PORTLAND, MAINE

Incorporated as city: 1786.

Chairman of City Council: Edward T. Colley (Dec. 1954).

City Manager: Julian H. Orr.

1940 population & (rank): 73,643 (128).

1950 population & (rank): 77,634 (148).

1940-50 population change: +5.4%.

1950 land area: 21.6 sq. mi.

Altitude: Highest, 187 ft.; lowest, sea level.

Location: In southwest part of state, on Casco Bay.

County: Seat of Cumberland Co.

Churches: 80, all denominations.



**City-owned parks:** 528.58 ac., including 133.20 ac. of municipal golf courses.  
**Telephones in Greater Portland:** 40,741.  
**Radio stations:** AM, 3; FM, 0.  
**Television stations:** UHF, 1; VHF, 2.  
**Assessed valuation (1953 personal & real):** \$102,631,800.  
**City tax rate (1953):** \$55.60 per \$1,000.  
**Bonded debt outstanding (Dec. 31, 1953):** \$4,748,725.  
**Revenue (1953):** \$7,077,020.  
**Expenditure (1953):** \$6,776,764.

The nearest U. S. port to Europe, Portland has looked to the sea throughout its history. In colonial days, a thriving shipping business was conducted with the West Indies. The sea also brought trouble, for the British fleet destroyed Portland in 1775. Enemy attack was nothing new, however, for the settlement previously had been sacked by the Indians and again by the French and Indians.

The sea now is a source of pleasure as well as profit. Portland lies on a peninsula at the head of Casco Bay, which has 132 islands. The larger ones are reached by steamer. A magnificent view of the islands, the sea, and the shore of Falmouth is obtained from Portland's Eastern Promenade. The Western Promenade affords an inland panorama to the high peaks of the White Mountains.

Portland is the leading wholesale distributing point for northern New England, and has over 140 manufacturing establishments.

The most famous house in the city is the Wadsworth-Longfellow House (open to the public in the summer) with exhibits of furniture and personal property of the Longfellow and Wadsworth families. In the L. D. M. Sweat Memorial Art Museum, fine and applied arts are on display.

## PORTLAND, OREG.

**Incorporated as city:** 1851.  
**Mayor:** Fred L. Peterson (Jan., 1957).  
**1940 population & (rank):** 305,394 (27).  
**1950 population & (rank):** 373,628 (29).  
**1940-50 population change:** +22.3%.  
**1954 area:** Land, 69.75 sq. mi.  
**Altitude:** Highest, 1,073 ft.; lowest, sea level.  
**Location:** In NW part of state, on Willamette River.  
**County:** Seat of Multnomah Co.  
**Churches:** Protestant, 400; Roman Catholic, 37; Jewish, 10; Buddhist, 2.  
**City-owned parks:** 111 (5,550 ac.).  
**Telephones (Mar. 1, 1953):** 211,468.  
**Radio stations:** AM, 8; FM, 5.  
**Television stations:** 2.  
**Assessed valuation (1953-54):** \$642,925,735.  
**City tax rate (1951-52):** \$17.20 per \$1,000.  
**Bonded debt (June 30, 1953):** \$23,461,227.  
**Revenue (1952-53):** \$26,384,667.  
**Expenditure (1952-53):** \$27,920,831.

Portland has a background of snow-capped mountains to the north and east. Mount Hood rises 11,245 feet above sea level, and is visible for great distances throughout Oregon. Because of the Japan Current, however, Portland itself has a mild climate.

So equable is the city's weather that climbing roses run rampant over fences and houses and sometimes even telephone poles. Portland holds a famous Rose Festival each year in June. Reflecting the diverse interests of the region, there takes place in October the Pacific International Livestock Exposition, including a horse show and rodeo.

Lewis and Clark sailed past the site of Portland in 1805, on an expedition across the continent for which Congress had appropriated \$2,500. They had started up the Missouri in the spring of 1804, and they reached the mouth of the Columbia River in canoes on Nov. 11, 1805. They built a fort near the present site of Astoria. From there up to Portland, the Columbia is wide and placid. At Portland the Willamette flows into the Columbia, which from that point east begins to flow through higher and higher bluffs up to the famous Columbia River Gorge. A dozen beautiful waterfalls drop hundreds of feet over the solid rock walls on the Oregon side of the gorge.

The great new aluminum plants and shipyards in the Portland area are among a large group of major industries founded in the Northwest following the completion of the great Bonneville Dam on the Columbia River.

## PROVIDENCE, R. I.

**Incorporated as city:** 1832.  
**Mayor:** Walter H. Reynolds (Jan., 1955).  
**1940 population & (rank):** 253,504 (37).  
**1950 population & (rank):** 248,674 (43).  
**1940-50 population change:** -1.9%.  
**1940 area:** Land, 17.9 sq. mi.; inland water, 1.0.  
**Altitude:** Highest, 253 ft.; lowest, sea level.  
**Location:** In northern part of state, at head of Providence River (north arm of Narragansett Bay).  
**County:** Seat of Providence Co.  
**Churches:** Protestant, 94; Roman Catholic, 31.  
**City-owned parks:** 33 (815 ac.).  
**Radio stations:** AM, 7; FM, 6.  
**Television stations:** 1.  
**City tax rate (1953):** \$31 per \$1,000.  
**Net bonded debt (1952 est.):** \$43,304,916.  
**Revenue (1953-54 budget):** \$29,707,850.  
**Expenditure (1953-54 budget):** \$29,679,753.

Roger Williams was a religious rebel, and he was banished from Massachusetts. In 1636 he founded Providence, which he so named in gratitude "for God's merciful providence in my distress." Two years later he organized the First Baptist Church "for the worship of God and to hold college commencements in." Brown University to this day holds its commencements in this church.

Roger Williams still is remembered in Providence by a monument overlooking his grave, and by 452-acre Roger Williams Park.

Since his time, Providence has become the second largest city in New England. Its early rise was due to its shipping trade, which included slaves, rum and molasses from the West Indies. Today it distributes oil, coal and lumber. Apart from sea trade, Providence has a thriving textile industry manufacturing woollens, worsteds and cot-



tons. The city is also a leading center for jewelry, machine tools, precision instruments and rubber goods.

## RICHMOND, VA.

Incorporated as city: 1782.

Mayor: Dr. Edward E. Haddock (July, 1954).

City Manager: Horace H. Edwards (Apptd. 1954).

1940 population & (rank): 193,042 (45).

1950 population & (rank): 230,310 (46).

1940-50 population change: +19.3%.

1951 area: Land, 39.89 sq. mi.; inland water, 2.81.

Altitude: Highest, 312 ft.; lowest, 0.

Location: In east central part of state, on James River.

County: Administratively independent.

Churches: Protestant, 201; Roman Catholic, 13; Jewish, 5; others, 74.

City-owned parks\*: 55 (1,100.29 ac.).

Radio stations: AM, 6; FM, 4.

Television stations: 1.

Assessed valuation (1953): \$481,285,405.

City tax rate (1949-50): Real and personal property, \$2.20 per \$100; machinery, \$1 per \$100.

Bonded debt (June 30, 1954): \$40,414,272.†

Revenue (1953-54): \$30,008,577.

Expenditure (1953-54): \$29,723,669.

\* Including 35 playgrounds. † Estimate.

In 1609, Capt. John Smith attempted to establish, near the present site of Richmond, a settlement which he called None Such. He was unsuccessful, however, and the land was later bought from Chief Powhatan for the Virginia Company. Richmond was laid out in 1737, became the state capital in 1779.

Today Richmond is one of the leading tobacco markets of the country. It has factories producing not only cigars and cigarettes but also chewing tobacco and snuff. Tobacco is its main industry.

Richmond had two periods of especial historical renown. One was in 1775 when the Virginia Convention met in St. John's Church to discuss the Revolution. George Washington and Thomas Jefferson attended. Patrick Henry made his famous speech.

Again, during the Civil War, Richmond came into the historical spotlight. The city was the capital of the Confederacy. One after another, the Northern generals—McClellan, Burnside, Hooker and Meade—failed to take Richmond. Grant finally succeeded, although not by storming the city itself. His siege of Petersburg ended in the downfall of the Confederacy. When Richmond was evacuated, the Confederate Congress ordered the burning of warehouses containing tobacco and cotton; and the principal business section of the city was destroyed by the spreading flames.

Among the historical buildings which remain in Richmond are the Capitol, which was designed by Thomas Jefferson after the Maison Carrée, an ancient Roman temple at Nîmes, France. In the rotunda is the famous statue of George Washington made from life in 1785 by Jean Antoine Houdon.

## ROCHESTER, N. Y.

Incorporated as city: 1834.

Mayor: Samuel B. Dicker (Dec., 1956).

City Manager: Robert P. Aex (apptd. 1954).

1940 population & (rank): 324,975 (23).

1950 population & (rank): 332,488 (32).

1940-50 population change: +2.3%.

1953 area: Land, 34.8 sq. mi.; inland water, 0.5.

Altitude: Highest, 655 ft.; lowest, 246 ft.

Location: In west part of state, on Genesee River.

County: Seat of Monroe Co.

Churches: Protestant, 128; Roman Catholic, 38; Jewish, 19; others, 22.

City-owned parks: 23 (2,000 ac.).

Telephones (1953): 185,000.

Radio sets (1953): 335,000.

Television sets (1953): 210,000.

Radio stations: AM, 6; FM, 2.

Television stations: 2.

Assessed valuation (1954): \$629,535,471.

City tax rate (1954): \$31.20 per \$1,000.

Bonded debt (Dec. 31, 1953): \$9,362,000.

Revenue (1953): \$40,929,874.

Expenditure (1953): \$38,444,125.

Rochester is the mecca of camera enthusiasts. Here is the home of the Eastman Kodak Company, and here is manufactured 90 per cent of the nation's motion-picture film. Tours of the Kodak plants are conducted daily. And at the George Eastman House is a photographic museum in which are exhibitions and demonstrations of picture processes of interest to both amateur and professional photographers.

Rochester also is one of the world's leading centers for the manufacture of optical goods and surgical instruments. The Bausch and Lomb Optical Company and the Taylor Instrument Company are here.

In addition to its factories, Rochester prides itself on its flowers. In the botanical gardens of Highland Park is the world's largest collection of lilacs—483 varieties. When they bloom, about the middle of May, a Lilac Week celebration is held.

The first permanent white settlement on the site of Rochester was made in 1812.

## ST. LOUIS, MO.

Incorporated as city: 1822.

Mayor: Raymond R. Tucker (Apr., 1957).

1940 population & (rank): 816,048 (8).

1950 population & (rank): 856,796 (8).

1940-50 population change: +5.0%.

1953 area: Land, 61.0 sq. mi.; inland water, 4.0.

Altitude: Highest, 605 ft.; lowest, 410 ft.

Location: On Mississippi River, 20 mi. south of its conjunction with Missouri River.

County: Independent city, not in county.

Churches: 1,043.

City-owned parks: 79 (2,846.61 ac.).

Telephones (1954): 608,000.

Radio sets (1954): 594,300.

Television sets (1953): 441,360.

Radio stations (1953): AM, 10; FM, 1.

Television stations (1953): 4.

Assessed valuation (1954): \$1,420,074,000.

City tax rate (1954): \$3.10 per \$100.

Bonded debt (1954): \$30,993,000.  
 Revenue (1953): \$61,632,361.  
 Expenditure (1953): \$57,023,996.

St. Louis is one of the nation's major industrial centers and its second largest transportation center. The city is served by 18 railroad trunk lines, 5 major airlines, a vast network of highways, and the growing inland waterways. It is also one of the nation's foremost food-distributing centers.

St. Louis is important in the production of shoes, stoves, chemicals, textiles, steel cars, machinery, automobile parts and accessories, building materials, corrugated paper boxes and containers, electrical appliances, millwork, steel, leather goods, meat, soap, paint and graniteware. It is the leading beer-producing center of the U. S.

The fame of St. Louis' Zoological Gardens, its Municipal Opera, its 85-piece Symphony Orchestra and its Missouri Botanical Gardens has spread throughout the world.

In Forest Park is the City Art Museum, ranked as one of the 4 best art collections in the U. S. The Jefferson Memorial, also in Forest Park, contains the famed Lindbergh Trophy—a priceless collection of gifts given to the aviator to commemorate his conquest of the Atlantic.

## SALT LAKE CITY, UTAH

Incorporated as city: 1851.  
 Mayor: Earl J. Glade (Jan., 1956).  
 1940 population & (rank): 149,934 (57).  
 1950 population & (rank): 182,121 (52).  
 1940-50 population change: +21.5%.  
 1950 area: Land, 54.872 sq. mi.; inland water, 0.  
 Altitude: 4,255 ft.  
 Location: In northern part of state, on Jordan River, near Great Salt Lake.  
 County: Seat of Salt Lake Co.  
 Churches: Mormon, 135; Roman Catholic, 8; Jewish, 4; others, 38.  
 City-owned parks: 20 (1,134 ac.).  
 Telephones (1953): 102,510.  
 Radio sets (1954): 261,321.\*  
 Television sets (1954): 155,000.\*  
 Radio stations: AM, 5; FM, 3.  
 Television stations: 2.  
 Assessed valuation (1954): \$220,633,476.  
 City tax rate (1954): \$22.50 per \$1,000.  
 Bonded debt (1954): \$1,660,000.  
 Revenue (1953): \$9,013,876.  
 Expenditure (1953): \$9,366,597.

\* Metropolitan area.

The Mormons, headed by Brigham Young, founded Salt Lake City in July, 1847, feeling that the soil was good, although dry. They dammed a creek across the site of the present city, and thereby introduced one of the first irrigation projects in America. Other Mormon bands came in, and by 1852 the colony numbered some 15,000.

Troops had to be kept in Salt Lake City for several years because of disagreements between non-Mormons and Mormons. The practice of polygamy was renounced by the Mormon Church in 1890, and Utah received statehood six years later.

Some of Salt Lake City's most interesting

edifices are those occupied or inspired by Brigham Young and his family. The Mormon Temple was 40 years in the building (1853-1893), and none but Mormons are permitted to enter. The Mormon Tabernacle, with its great domed roof, seats 8,000 people. The acoustical properties of the building are reputed to be so remarkable that a pin dropped at the organ may be heard from the farthest seat. The organ contains more than 10,500 pipes, and its programs have been heard over nation-wide radio networks. The public is admitted at specified hours.

Sixteen miles from Salt Lake City is Great Salt Lake, an inland sea.

## SAN FRANCISCO, CALIF.

Incorporated as city: 1850.  
 Mayor: Elmer E. Robinson (Jan., 1956).  
 1940 population & (rank): 634,536 (12).  
 1950 population & (rank): 775,357 (11).  
 1940-50 population change: +22.2%.  
 1940 area: Land, 44.6 sq. mi.; inland water, 48.5.  
 Altitude: Highest, 900 ft.; lowest, sea level.  
 Location: Between Pacific Ocean and San Francisco Bay.  
 County: Coextensive with San Francisco Co.  
 Churches: 334.  
 City-owned parks: 52.  
 Telephones (1954): 446,594 (including Presidio).  
 Radio sets (1954): 298,910.  
 Television sets (1954): 207,216.  
 Radio stations: AM, 8; FM, 6.  
 Television stations: 4.  
 Assessed valuation (1953-54): \$1,884,884,826.  
 City tax rate (1953): \$6.31 per \$100.  
 Bonded debt (July 1, 1954): \$185,602,000.  
 Revenue (1952-53): \$126,606,802.  
 Expenditure (1952-53): \$127,203,977.

A narrow arm of land embraces San Francisco Bay, the largest land-locked harbor in the world, and shelters it from the Pacific Ocean. On this arm of land is San Francisco, a city on hills, almost surrounded by water.

In 1776, the Spaniards established a presidio, or military post, on the end of the fabulously beautiful peninsula. In the following year, a little town called Yerba Buena ("Good Herb," because mint grew in abundance) was founded—the origin of the present San Francisco.

When gold was discovered in California in 1848, the city quickly jumped to 10,000, and it experienced turbulent years until order was established by Vigilance Committees, first in 1851 and again in 1856. Then followed a period of more orderly growth, and the foundations of the great commerce and industry of today were laid.

San Francisco is the outstanding seaport on the Pacific Coast. Its 43 piers and 17 miles of berthing space handle more than 30 million tons of freight a year. It was one of the great shipbuilding centers in World War I, at Mare Island, and again in World War II, in the Henry Kaiser mass-production yards. It remains one of the country's major naval-training centers.

Two of the world's most famous bridges are



at San Francisco. One is the Golden Gate Bridge, spanning the strait which is the entrance to the bay. It is the largest single-span suspension bridge in the world, with an over-all length of 8,940 feet. The other bridge connects San Francisco with Oakland across the bay to the east. It is  $8\frac{1}{4}$  miles long, including approaches, and  $4\frac{1}{2}$  miles of it is over navigable water.

San Francisco has the only municipally owned opera house in America. It is one of the buildings in the Civic Center, which occupies more than three square blocks. In 1945, the Civic Center was the scene of the international conference that drew up the Charter for the U. N. and was also the site of the signing of the Japanese peace treaty.

The largest Chinatown outside the Orient occupies twelve square blocks of San Francisco and has a population of 16,000.

## SEATTLE, WASH.

Incorporated as city: 1869.

Mayor: Allan Pomeroy (June, 1956).

1940 population & (rank): 368,302 (22).

1950 population & (rank): 467,591 (19).

1953 est. population: 548,000.

1940-50 population change: +27.0%.

1953 area: Land, 90.24 sq. mi.; inland water, 12.2.

Altitude: Highest, 540 ft.; lowest, sea level.

Location: In west central part of state, on Puget Sound.

County: Seat of King Co.

Churches: Protestant, 265; Roman Catholic, 29; Jewish, 7.

City-owned parks: 182 (3,099 ac.).

Telephones (1954): 294,463.

Radio sets (1954): 248,560.

Television sets (1954): 165,000.

Radio stations: AM, 9; FM, 3.

Television stations: 2.

Assessed valuation (1952): \$528,901,603.

City tax rate (1952): \$53.20 per \$1,000.

Bonded debt\* (Dec. 31, 1953): \$17,028,000.

Revenue\* (1953): \$28,511,946.

Expenditure\* (1952): \$28,918,043.

\*General; not including city-owned light, water, transit systems.

Seattle is the home of the world-famous Boeing Airplanes, as well as many other manufacturers supplying specialized equipment for logging, fishing, shipbuilding, mining and other industries of great regional importance.

Puget Sound claims the title "Small Boat Capital of the World," having the highest per capita ownership of small craft. The Lake Washington Floating Bridge carries an average of 30,000 vehicles a day to the suburban areas east of the lake and to the short route to Snoqualmie Pass in the Cascade Mountains and to eastern Washington.

The annual Gold Cup unlimited hydroplane races were held on Lake Washington in 1951, 1952 and 1953.

The University of Washington, with an enrollment of about 15,000, is the largest educational establishment in the state.

## SYRACUSE, N. Y.

Incorporated as city: 1848.

Mayor: Donald H. Mead (Dec. 1957).

1940 population & (rank): 205,987 (41).

1950 population & (rank): 220,583 (47).

1940-50 population change: +7.1%.

1950 land area: 25.77 sq. mi.

Altitude: Highest, 840 ft.; lowest, 363.

Location: Central part of state, near Oneida Lake.

County: Seat of Onondaga Co.

Churches: Protestant, 76; Roman Catholic, 23;

Jewish, 8; others, 8.

City-owned parks: 174 (2,161 ac.).

Telephones in Syracuse metropolitan area: 132,-565.

Radio sets, est. (1954): 179,013.

Television sets (1953): 58,426.

Radio stations: AM, 5; FM, 2.

Television stations: 2.

Assessed valuation (1954): Real estate, \$380,-369,994; special franchise, \$18,051,797.

City tax rate: \$12.116 per \$1,000.

School tax rate: \$16.788.

Bonded debt (Dec. 31, 1953): \$3,708,039 (includes \$2,810,439 self-liquidating water bonds).

Revenue (1953): \$26,634,167.

Expenditure (1953): \$24,553,898.

Syracuse, the Hub of the Empire State, is 47th in rank among U. S. cities, with 1950 population of 220,583. It is the county seat of Onondaga County, population 340,719.

Settlers were attracted to Onondaga after the Revolution by opening of the salt springs there under state control. Pere Simon LeMoyné, French Jesuit, guided by Indians, discovered the salt in 1654. This was the seat of the Iroquois Confederacy, with the Long House kept at Onondaga.

The old Salt City, Syracuse, developed from a union of the village Syracuse with Salina, on the lake. The city was chartered in 1848. The site was opened in 1804 and the village chartered in 1825, the year of the opening of the old Erie Canal.

Industry employing 60,000 is diversified. Electronics, electrical machinery, air conditioning equipment, tool steel, typewriters, washing machines, chinaware, laundry and dry-cleaning equipment, auto gears, transmission and differentials, automotive accessories, components and parts, and the chemical industry employ respectively several thousand to 10,000 each.

The seat of the New York State Fair, the city is also the seat of Syracuse University with the New York State College of Medicine and State College of Forestry, and LeMoyné College, Jesuit liberal arts college. The National Ceramic Show is conducted in the city museum. The Intercollegiate Regatta is rowed on Onondaga Lake. The municipal airport with runways up to 8,500 feet has the second highest passenger and freight traffic in the state, outside the metropolis.

## WASHINGTON, D. C.

For District of Columbia, see p. 162.



# Tabulated Data on City Governments

Source: Questionnaires to the cities.

City	MAYOR		City manager's salary <sup>1,2</sup>	COUNCIL OR COMMISSION			
	Term, years	Salary <sup>1</sup>		Name	Members	Term, years	Salary <sup>1</sup>
Atlanta, Ga.....	4	\$16,000	.....	Bd. of Aldermen	17	4	\$ 300 <sup>3</sup>
Baltimore, Md.....	4	15,000	.....	Council	21	4	4,200 <sup>13</sup>
Birmingham, Ala.....	4	10,000	.....	Commission	3	4	9,000
Boston, Mass.....	4	20,000	.....	Council	9	2	5,000
Buffalo, N. Y.....	4	20,000	.....	Council	15	2 <sup>4</sup>	6,000 <sup>20</sup>
Chicago, Ill.....	4	18,000	.....	Council	50	4	5,000 <sup>14</sup>
Cincinnati, Ohio.....	2	10,352	\$25,000	Council	9	2	8,000
Cleveland, Ohio.....	2	25,000	.....	Council	33	2	5,000
Columbus, Ohio.....	4	11,500	.....	Council	7	4	1,000
Dallas, Tex.....	2	20 <sup>5</sup>	20,000	Council	9	2	20 <sup>8</sup>
Denver, Colo.....	4	14,000	.....	Council	9	4	3,000 <sup>10</sup>
Des Moines, Iowa.....	4	300	22,500	Council	5	4 <sup>6</sup>	300
Detroit, Mich.....	4	25,000	.....	Council	9	4	12,000
Harrisburg, Pa.....	4	6,150	.....	Council	5	4	5,400
Hartford, Conn.....	2	None	18,750	Council	9	2	None
Honolulu, Hawaii.....	2	14,000	.....	Bd. of Superv.	7	2	3,600
Houston, Tex.....	2	20,000	.....	Council	8	2	300 <sup>7</sup>
Indianapolis, Ind.....	4	13,200	.....	Council	9	4	1,200 <sup>16</sup>
Jersey City, N. J.....	4	8,000	.....	Commission	5 <sup>15</sup>	4	7,500
Los Angeles, Calif.....	4	18,000	.....	Council	15	4	7,200
Memphis, Tenn.....	4	15,500	.....	Commission	5	4	7,200 <sup>21</sup>
Miami, Fla.....	2	5,000	25,000	Commission	5	4	5,000
Milwaukee, Wis.....	4	14,087	.....	Council	27	4	5,687
Minneapolis, Minn.....	2	10,750	.....	Council	13	2	5,000
New Bedford, Mass.....	2	6,500	.....	Council	11	2	500
New Orleans, La.....	4	12,000	.....	Commission	8	4	7,500
New York, N. Y.....	4	40,000	.....	Council	25	4	7,000
Newark, N. J.....	4	25,000	.....	Council	5 <sup>12</sup>	4	4,000
Oklahoma City, Okla.....	4	1,000	15,000	Council	8	4	10 <sup>5</sup>
Philadelphia, Pa.....	4	25,000	.....	Council	17	4	9,000 <sup>9</sup>
Pittsburgh, Pa.....	4	20,000	.....	Council	9	4	8,000 <sup>17</sup>
Portland, Maine.....	1 <sup>22</sup>	500 <sup>22</sup>	15,000	Council	9	3	500
Portland, Oreg.....	4	11,880	.....	Commission	4	4	10,080
Providence, R. I.....	2	15,000	.....	Council	26	2	1,500
Richmond, Va.....	2	1,800	22,000	Council	9	2	1,200
Rochester, N. Y.....	2	3,000	15,000	Council	9	4	2,000
St. Louis, Mo.....	4	10,000	.....	Bd. of Aldermen	29	4	3,000 <sup>11</sup>
St. Paul, Minn.....	2	7,500	.....	Council	7 <sup>12</sup>	2	6,204
Salt Lake City, Utah.....	4	7,500	.....	Commission	5	4	6,000
San Francisco, Calif.....	4	22,400	.....	Council	11	4	2,400
Seattle, Wash.....	4	12,000	.....	Council	9	4	7,200
Spokane, Wash.....	.....	5,000	.....	Commission	5	4	5,000
Syracuse, N. Y.....	4	15,000	.....	Council	10	2 <sup>18</sup>	2,500 <sup>19</sup>
Tulsa, Okla.....	2	8,200	.....	Commission	4	2	6,000
Wichita, Kans.....	1	360	15,000	Commission	5	4	360
Winston-Salem, N. C.....	2	2,400	14,000	Bd. of Aldermen	8 <sup>12</sup>	2	137

<sup>1</sup> Annual, unless otherwise indicated. <sup>2</sup> City Manager's term is indefinite and at will of Council. <sup>3</sup> Per month. <sup>4</sup> For 9 District Councilmen; 4 years for 5 Councilmen-at-large. <sup>5</sup> Per Council meeting. <sup>6</sup> For 3 members; 2 years for 2 members. <sup>7</sup> Per month part-time. <sup>8</sup> Per council meeting; not over \$1,040 per year. <sup>9</sup> President receives \$10,000. <sup>10</sup> President receives \$4,000. <sup>11</sup> President receives \$5,000. <sup>12</sup> Including mayor. <sup>13</sup> President receives \$6,500. <sup>14</sup> Chairman of Finance Committee receives \$3,500 additional. <sup>15</sup> Including mayor. <sup>16</sup> President and Chairman of Finance Comm. receive \$1,800. <sup>17</sup> For 5 Councilmen; 4 receive \$10,000. After Jan. 1, 1954, all Councilmen to receive \$10,000. <sup>18</sup> For 5 District Councilmen; 4 years for 4 Councilmen-at-large and President. <sup>19</sup> President receives \$3,500. <sup>20</sup> President receives \$12,000. <sup>21</sup> Vice-Mayor, who is Commissioner of Fire and Police, has salary of \$8,400. <sup>22</sup> Chairman of City Council.

## Tabulated Data on State Governments

Source: Questionnaires to the states.

State	GOVERNOR		LEGISLATURE <sup>1</sup>					HIGHEST COURT <sup>2</sup>			
	Term	Annual salary	Membership		Term	Salaries of members <sup>5</sup>	Members	Term	Annual salary		
			U <sup>3</sup>	L <sup>4</sup>	U <sup>3</sup>	L <sup>4</sup>					
Alabama.....	4 <sup>6</sup>	\$12,000	35	106	4	4	\$	10 per diem	7	6	\$12,000
Arizona.....	2	15,000	28	80	2	2		8 per diem <sup>19</sup>	5	6	12,500
Arkansas.....	2	10,000	35	100	4	2		1,200 per biennium	7	8	9,000
California.....	4	25,000	40	80	4	2		3,600 per annum	7	12	21,000 <sup>25</sup>
Colorado.....	2	10,000 <sup>7</sup>	35	65	4	2		100 per month	7	10	12,000
Connecticut.....	4	15,000	36	279	2	2		600 per term	5	8	15,000 <sup>10</sup>
Delaware.....	4	12,000	17	35	4	2		1,077 per annum	3	12	17,000 <sup>27</sup>
Florida.....	4 <sup>8</sup>	15,000	38	95	4	2		10 per diem	7	6	13,500
Georgia.....	4 <sup>8</sup>	12,000 <sup>28</sup>	54	205	2	2		15 per diem	7	6	8,000
Idaho.....	4 <sup>8</sup>	10,000	44	59	2	2		10 per diem	5	6	8,500
Illinois.....	4	25,000	51	153	4	2		10,000 per annum	7	9	20,000
Indiana.....	4 <sup>8</sup>	15,000	50	100	4	2		1,200 per annum	5	6	13,500
Iowa.....	2	12,000	50	108	4	2		2,000 per session	9	6	10,000
Kansas.....	2	10,000	40	125	4	2		5 per diem	7	6	10,000
Kentucky.....	4 <sup>8</sup>	10,000	38	100	4	2		25 per diem	7	8	12,000
Louisiana.....	4	18,000	39	101	4	4		30 per diem	7	14	18,000
Maine.....	2	10,000	33	151	2	2		1,000 per session	6	7	11,000 <sup>29</sup>
Maryland.....	4 <sup>8</sup>	4,500	29	123	4	4		1,800 per annum	5	15	16,500 <sup>15</sup>
Massachusetts.....	2	20,000	40	240	2	2		4,500 per annum	7	Life	18,500
Michigan.....	2	22,500	34	110	2	2		4,000 per annum	8	8	18,500
Minnesota.....	2	15,000	67	131	4	2		3,000 per session <sup>24</sup>	7	6	13,500 <sup>30</sup>
Mississippi.....	4 <sup>8</sup>	15,000	49	140	4	4		2,000 per session	9	8	11,000
Missouri.....	4 <sup>8</sup>	10,000	34	157	4	2		1,500 per annum	7	12	17,500
Montana.....	4	10,000	56	90	4	2		10 per diem	5	6	9,000
Nebraska.....	2	11,000	43 <sup>11</sup>		2 <sup>11</sup>			872 per annum	7	6	9,100
Nevada.....	4	9,100	17	47	4	2		15 per diem	3	6	10,000
New Hampshire.....	2	10,000	24	(14)	2	2		200 per biennium	5	(14)	12,000
New Jersey.....	4 <sup>8</sup>	30,000	21	60	4	2		3,000 per annum	7	7	24,000 <sup>12</sup>
New Mexico.....	2 <sup>8</sup>	15,000	31	55	4	2		10 per diem	5	8	12,500
New York.....	4	50,000	56	150	2	2		5,000 per annum	7	14	32,500
North Carolina.....	4 <sup>8</sup>	15,000	50	120	2	2		15 per diem <sup>21</sup>	7	8	16,000
North Dakota.....	2	9,000	49	113	4	2		5 per diem	5	10	10,000
Ohio.....	2	20,000	33	135	2	2		3,200 per annum	7	6	16,000
Oklahoma.....	4 <sup>8</sup>	15,000	44	(14)	4	2		15 per diem <sup>17</sup>	9	6	12,500
Oregon.....	4 <sup>8</sup>	15,000	30	60	4	2		600 per annum	7	6	12,500
Pennsylvania.....	4 <sup>8</sup>	25,000	50	208	4	2		3,000 per session	7	21	25,000 <sup>9</sup>
Rhode Island.....	2	15,000	44	100	2	2		5 per diem <sup>18</sup>	5	(20)	17,000 <sup>18</sup>
South Carolina.....	4 <sup>8</sup>	15,000	46	124	4	2		1,000 per session	5	10	10,000
South Dakota.....	2 <sup>8</sup>	9,500	35	75	2	2		1,050 per biennium	5	6	8,700
Tennessee.....	4 <sup>8</sup>	12,000	33	99	2	2		10 per diem <sup>22</sup>	5	8	12,000
Texas.....	2	12,000	31	150	4	2		10 per diem <sup>23</sup>	(21)	6	15,000
Utah.....	4	10,000	23	60	4	2		500 per annum	5	10	9,000
Vermont.....	2	11,000	30	246	2	2		1,250 per session <sup>22</sup>	5	2	10,000 <sup>22</sup>
Virginia.....	4 <sup>8</sup>	15,000	40	100	4	2		1,080 per session <sup>24</sup>	7	12	12,000 <sup>28</sup>
Washington.....	4	15,000	46	99	4	2		1,200 per annum	9	6	12,000
West Virginia.....	4 <sup>8</sup>	12,500	32	100	4	2		500 per annum	5	12	12,500
Wisconsin.....	2	14,000	33	100	4	2		200 per month	7	10	12,000 <sup>28</sup>
Wyoming.....	4	12,000	27	56	4	2		12 per diem	3	8	11,000

<sup>1</sup> Known as **General Assembly** in Arkansas, Colorado, Connecticut, Delaware, Georgia, Illinois, Indiana, Iowa, Kentucky, Maryland, Missouri, North Carolina, Ohio, Pennsylvania, Rhode Island, South Carolina, Tennessee, Vermont, Virginia; **Legislative Assembly** in Montana, North Dakota, Oregon; **General Court** in Massachusetts, New Hampshire; **Legislature** in other states. Meets annually in Arizona, California, Maryland, Massachusetts, Michigan, New Jersey, New York, Rhode Island, South Carolina, Arizona, biennially in other states. <sup>2</sup> Known as **Court of Appeals** in Kentucky, Maryland, New York; **Supreme Court of Appeals** in Virginia, West Virginia; **Supreme Judicial Court** in Maine, Massachusetts; **Supreme Court of Errors** in Connecticut; **Supreme Court** in other states. <sup>3</sup> Upper house; known as **Senate** in all states. <sup>4</sup> Lower house; known as **Assembly** in California, Nevada, New York, Wisconsin; **House of Delegates** in Maryland, Virginia, West Virginia; **House of Assembly** in New Jersey; **House of Representatives** in other states. <sup>5</sup> Does not include additional payment for expenses, mileage, etc. <sup>6</sup> Cannot succeed himself. <sup>7</sup> To be \$17,500 in 1955. <sup>8</sup> May not serve a third consecutive term. <sup>9</sup> Chief Justice, \$25,500. <sup>10</sup> Chief Justice, \$15,500. <sup>11</sup> Unicameral legislature. <sup>12</sup> Chief Justice, \$25,000. <sup>13</sup> Varies from 119 to 123. <sup>14</sup> During session; \$100 per month when not in session. <sup>15</sup> Chief Justice, \$17,500. <sup>16</sup> Varies from 60 to 90 days only. <sup>17</sup> Term of good behavior. <sup>18</sup> 6 member in Supreme Court (highest in civil cases). <sup>19</sup> 3 members in Court of Criminal Appeals. <sup>20</sup> For 75 days only. <sup>21</sup> For first 120 days: \$5 per diem thereafter. <sup>22</sup> House; Senate, \$6,000. <sup>23</sup> Chief Justice, \$21,500. <sup>24</sup> Governor declined raise offered by 1953 Legislature. <sup>25</sup> Chief Justice, \$17,500. <sup>26</sup> Chief Justice, \$12,500. <sup>27</sup> Chief Justice, \$12,000. <sup>28</sup> Chief Justice, \$14,500. <sup>29</sup> For 90 only. <sup>30</sup> Plus \$5 each day over 125 days. <sup>31</sup> Chief Justice, \$10,500.

## Road Mileages Between U. S. Cities

Copyright, General Drafting Co., Inc.

Cities	Birmingham	Boston	Buffalo	Chicago	Cleveland	Dallas	Denver
Birmingham, Ala. ....		1,205	930	680	740	655	1,315
Boston, Mass. ....	1,205		460	990	650	1,850	2,000
Buffalo, N. Y. ....	930	460		530	190	1,400	1,550
Chicago, Ill. ....	680	990	530		340	960	1,020
Cleveland, Ohio ....	740	650	190	340		1,210	1,360
Dallas, Tex. ....	655	1,850	1,400	960	1,210		780
Denver, Colo. ....	1,315	2,000	1,550	1,020	1,360	780	
Detroit, Mich. ....	755	720	260	280	170	1,190	1,315
El Paso, Tex. ....	1,290	2,415	1,970	1,530	1,780	615	700
Houston, Tex. ....	675	1,895	1,505	1,100	1,330	245	1,035
Indianapolis, Ind. ....	510	930	500	190	305	910	1,070
Kansas City, Mo. ....	715	1,415	985	510	790	510	260
Los Angeles, Calif. ....	2,085	3,085	2,640	2,120	2,415	1,425	1,170
Louisville, Ky. ....	395	970	540	305	350	865	1,145
Memphis, Tenn. ....	255	1,355	925	545	730	480	1,085
Miami, Fla. ....	780	1,565	1,485	1,400	1,335	1,370	2,135
Minneapolis, Minn. ....	1,065	1,230	770	440	765	995	845
New Orleans, La. ....	360	1,570	1,290	945	1,075	510	1,290
New York, N. Y. ....	985	215	395	845	500	1,625	1,795
Omaha, Nebr. ....	925	1,460	1,015	480	825	665	540
Philadelphia, Pa. ....	895	300	380	770	430	1,545	1,715
Phoenix, Ariz. ....	1,710	2,700	2,255	1,785	2,110	1,040	840
Pittsburgh, Pa. ....	765	590	225	470	125	1,260	1,430
St. Louis, Mo. ....	495	1,160	730	295	535	665	875
Salt Lake City, Utah ....	1,820	2,425	1,975	1,410	1,785	1,265	515
San Francisco, Calif. ....	2,425	3,190	2,740	2,195	2,550	1,785	1,270
Seattle, Wash. ....	2,705	2,950	2,480	2,120	2,485	2,185	1,385
Washington, D. C. ....	755	435	380	705	365	1,400	1,645

Cities	Detroit	El Paso	Houston	Indianapolis	Kansas City	Los Angeles	Louisville
Birmingham, Ala. ....	755	1,290	675	510	715	2,085	395
Boston, Mass. ....	720	2,415	1,895	930	1,415	3,085	970
Buffalo, N. Y. ....	260	1,970	1,505	500	985	2,640	540
Chicago, Ill. ....	280	1,530	1,100	190	510	2,120	305
Cleveland, Ohio ....	170	1,780	1,330	305	790	2,415	350
Dallas, Tex. ....	1,190	615	245	910	510	1,425	865
Denver, Colo. ....	1,315	700	1,035	1,070	620	1,170	1,145
Detroit, Mich. ....		1,755	1,300	275	740	2,400	360
El Paso, Tex. ....	1,755		760	1,480	1,010	805	1,495
Houston, Tex. ....	1,300	760		1,020	765	1,545	980
Indianapolis, Ind. ....	275	1,480	1,020		485	2,150	115
Kansas City, Mo. ....	740	1,010	765	485		1,610	520
Los Angeles, Calif. ....	2,400	805	1,545	2,145	1,610		2,175
Louisville, Ky. ....	360	1,495	980	115	520	2,175	
Memphis, Tenn. ....	715	1,105	575	450	475	1,835	380
Miami, Fla. ....	1,380	2,005	1,220	1,530	2,820	1,080	1,030
Minneapolis, Minn. ....	525	1,420	1,255	615	475	2,010	730
New Orleans, La. ....	1,115	1,115	365	840	875	1,920	740
New York, N. Y. ....	650	2,205	1,655	720	1,205	2,875	755
Omaha, Nebr. ....	745	1,095	910	590	210	1,690	705
Philadelphia, Pa. ....	575	2,125	1,565	645	1,130	2,795	680
Phoenix, Ariz. ....	2,040	420	1,160	1,770	1,280	385	1,795
Pittsburgh, Pa. ....	285	1,840	1,375	360	840	2,510	395
St. Louis, Mo. ....	515	1,230	805	230	250	1,895	270
Salt Lake City, Utah ....	1,710	875	1,450	1,560	1,135	740	1,660
San Francisco, Calif. ....	2,475	1,210	1,950	2,325	1,890	405	2,430
Seattle, Wash. ....	2,230	1,795	2,365	2,325	1,925	1,180	2,465
Washington, D. C. ....	525	2,045	1,430	565	1,050	2,725	600



## Road Mileages Between U. S. Cities

Copyright, General Drafting Co., Inc.

Cities	Memphis	Miami	Minneapolis	New Orleans	New York	Omaha	Philadelphia
Birmingham, Ala. ....	255	780	1,065	360	985	925	895
Boston, Mass. ....	1,355	1,565	1,230	1,570	215	1,460	300
Buffalo, N. Y. ....	925	1,485	770	1,290	395	1,015	380
Chicago, Ill. ....	545	1,400	440	945	845	480	770
Cleveland, Ohio ....	730	1,335	765	1,075	500	825	430
Dallas, Tex. ....	480	1,370	995	510	1,625	665	1,545
Denver, Colo. ....	1,085	2,135	845	1,290	1,795	540	1,715
Detroit, Mich. ....	715	1,380	525	1,115	650	745	575
El Paso, Tex. ....	1,105	2,005	1,420	1,115	2,205	1,095	2,125
Houston, Tex. ....	575	1,220	1,255	365	1,655	910	1,565
Indianapolis, Ind. ....	450	1,220	615	840	720	590	645
Kansas City, Mo. ....	475	1,530	475	875	1,205	210	1,130
Los Angeles, Calif. ....	1,835	2,820	2,010	1,920	2,875	1,690	2,795
Louisville, Ky. ....	380	1,080	730	740	755	705	680
Memphis, Tenn. ....	....	1,030	865	400	1,130	685	1,040
Miami, Fla. ....	1,030	....	1,820	885	1,340	1,735	1,250
Minneapolis, Minn. ....	865	1,820	....	1,265	1,270	355	1,195
New Orleans, La. ....	400	885	1,265	....	1,340	1,085	1,250
New York, N. Y. ....	1,130	1,340	1,270	1,340	....	1,290	90
Omaha, Nebr. ....	685	1,735	355	1,085	1,290	....	1,210
Philadelphia, Pa. ....	1,040	1,250	1,195	1,250	90	1,210	....
Phoenix, Ariz. ....	1,500	2,410	1,680	1,535	2,500	1,355	2,410
Pittsburgh, Pa. ....	775	1,240	895	1,125	370	915	300
St. Louis, Mo. ....	305	1,265	560	710	960	460	880
Salt Lake City, Utah ....	1,600	2,615	1,285	1,775	2,255	950	2,175
San Francisco, Calif. ....	2,175	3,160	2,040	2,295	3,020	1,715	2,940
Seattle, Wash. ....	2,400	3,425	1,680	2,695	2,985	1,680	2,905
Washington, D. C. ....	905	1,115	1,130	1,115	230	1,145	140

Cities	Phoenix	Pittsburgh	St. Louis	Salt Lake City	San Francisco	Seattle	Washington
Birmingham, Ala. ....	1,710	765	495	1,820	2,425	2,705	755
Boston, Mass. ....	2,700	590	1,180	2,425	3,190	2,950	435
Buffalo, N. Y. ....	2,255	225	730	1,975	2,740	2,480	380
Chicago, Ill. ....	1,785	470	295	1,410	2,195	2,120	705
Cleveland, Ohio ....	2,110	125	535	1,785	2,550	2,485	365
Dallas, Tex. ....	1,040	1,260	665	1,265	1,785	2,185	1,400
Denver, Colo. ....	840	1,430	875	515	1,270	1,385	1,645
Detroit, Mich. ....	2,040	285	515	1,710	2,475	2,230	525
El Paso, Tex. ....	420	1,840	1,230	875	1,210	1,795	2,045
Houston, Tex. ....	1,160	1,375	805	1,450	1,950	2,365	1,430
Indianapolis, Ind. ....	1,770	360	230	1,560	2,325	2,325	565
Kansas City, Mo. ....	1,280	840	250	1,135	1,890	1,925	1,050
Los Angeles, Calif. ....	385	2,510	1,895	740	405	1,180	2,725
Louisville, Ky. ....	1,795	395	270	1,660	2,430	2,465	600
Memphis, Tenn. ....	1,500	775	305	1,600	2,175	2,400	905
Miami, Fla. ....	2,410	1,240	1,265	2,615	3,160	3,425	1,115
Minneapolis, Minn. ....	1,680	895	560	1,285	2,040	1,680	1,130
New Orleans, La. ....	1,535	1,125	710	1,775	2,295	2,695	1,115
New York, N. Y. ....	2,500	370	960	2,255	3,020	2,985	230
Omaha, Nebr. ....	1,355	915	480	950	1,715	1,680	1,145
Philadelphia, Pa. ....	2,410	300	880	2,175	2,940	2,905	140
Phoenix, Ariz. ....	....	2,125	1,535	725	790	1,595	2,340
Pittsburgh, Pa. ....	2,125	....	585	1,880	2,645	2,610	235
St. Louis, Mo. ....	1,535	585	....	1,385	2,140	2,175	805
Salt Lake City, Utah ....	725	1,880	1,385	....	755	895	2,110
San Francisco, Calif. ....	790	2,645	2,140	755	....	890	2,875
Seattle, Wash. ....	1,595	2,610	2,175	895	890	....	2,845
Washington, D. C. ....	2,340	235	805	2,110	2,875	2,845	....

## Air Distances Between U. S. Cities

Source: U. S. Coast and Geodetic Survey.

Cities	Birmingham	Boston	Buffalo	Chicago	Cleveland	Dallas	Denver
Birmingham, Ala. ....		1,052	776	578	618	581	1,095
Boston, Mass. ....	1,052		400	851	551	1,551	1,769
Buffalo, N. Y. ....	776	400		454	173	1,198	1,370
Chicago, Ill. ....	578	851	454		308	803	920
Cleveland, Ohio ....	618	551	173	308		1,025	1,227
Dallas, Tex. ....	581	1,551	1,198	803	1,025		663
Denver, Colo. ....	1,095	1,769	1,370	920	1,227	663	
Detroit, Mich. ....	641	613	216	238	90	999	1,156
El Paso, Tex. ....	1,152	2,072	1,692	1,252	1,525	572	557
Houston, Tex. ....	567	1,605	1,286	960	1,114	225	879
Indianapolis, Ind. ....	433	807	435	165	263	763	1,000
Kansas City, Mo. ....	579	1,251	861	414	700	451	558
Los Angeles, Calif. ....	1,802	2,596	2,198	1,745	2,049	1,240	831
Louisville, Ky. ....	331	826	483	269	311	726	1,038
Memphis, Tenn. ....	217	1,137	803	482	630	420	879
Miami, Fla. ....	665	1,255	1,181	1,188	1,087	1,111	1,726
Minneapolis, Minn. ....	862	1,123	731	355	630	862	700
New Orleans, La. ....	312	1,359	1,086	833	924	443	1,082
New York, N. Y. ....	864	188	292	713	405	1,374	1,631
Omaha, Nebr. ....	732	1,282	883	432	730	586	488
Philadelphia, Pa. ....	783	271	279	666	360	1,299	1,579
Phoenix, Ariz. ....	1,456	2,300	1,906	1,453	1,749	887	586
Pittsburgh, Pa. ....	608	483	178	410	115	1,070	1,320
St. Louis, Mo. ....	400	1,038	662	262	492	547	796
Salt Lake City, Utah ....	1,466	2,099	1,699	1,260	1,568	999	371
San Francisco, Calif. ....	2,013	2,699	2,300	1,858	2,166	1,483	949
Seattle, Wash. ....	2,082	2,493	2,117	1,737	2,026	1,681	1,021
Washington, D. C. ....	661	393	292	597	306	1,185	1,494

Cities	Detroit	El Paso	Houston	Indianapolis	Kansas City	Los Angeles	Louisville
Birmingham, Ala. ....	641	1,152	567	433	579	1,802	331
Boston, Mass. ....	613	2,072	1,605	807	1,251	2,596	826
Buffalo, N. Y. ....	216	1,692	1,286	435	861	2,198	483
Chicago, Ill. ....	238	1,252	960	165	414	1,745	269
Cleveland, Ohio ....	90	1,525	1,114	263	700	2,049	311
Dallas, Tex. ....	999	572	225	763	451	1,240	726
Denver, Colo. ....	1,156	557	879	1,000	558	831	1,038
Detroit, Mich. ....		1,479	1,105	240	645	1,983	316
El Paso, Tex. ....	1,479		676	1,264	839	701	1,254
Houston, Tex. ....	1,105	676		865	644	1,374	803
Indianapolis, Ind. ....	240	1,264	865		453	1,809	107
Kansas City, Mo. ....	645	839	644	453		1,356	480
Los Angeles, Calif. ....	1,802	701	1,374	1,809	1,356		1,829
Louisville, Ky. ....	316	1,254	803	107	480	1,829	
Memphis, Tenn. ....	623	976	484	384	369	1,603	320
Miami, Fla. ....	1,152	1,643	968	1,024	1,241	2,339	919
Minneapolis, Minn. ....	543	1,157	1,056	511	413	1,524	605
New Orleans, La. ....	939	983	318	712	680	1,673	623
New York, N. Y. ....	482	1,905	1,420	646	1,097	2,481	652
Omaha, Nebr. ....	669	878	794	525	166	1,315	580
Philadelphia, Pa. ....	443	1,836	1,341	585	1,038	2,394	582
Phoenix, Ariz. ....	1,690	346	1,017	1,499	1,049	357	1,508
Pittsburgh, Pa. ....	205	1,590	1,137	330	781	2,136	344
St. Louis, Mo. ....	455	1,034	679	231	238	1,589	242
Salt Lake City, Utah ....	1,492	689	1,200	1,356	925	579	1,402
San Francisco, Calif. ....	2,091	995	1,645	1,949	1,506	347	1,986
Seattle, Wash. ....	1,938	1,376	1,891	1,872	1,506	959	1,943
Washington, D. C. ....	396	1,728	1,220	494	945	2,300	476

## Air Distances Between U. S. Cities

Source: U. S. Coast and Geodetic Survey.

Cities	Memphis	Miami	Minneapolis	New Orleans	New York	Omaha	Philadelphia
Birmingham, Ala. ....	217	665	862	312	864	732	783
Boston, Mass. ....	1,137	1,255	1,123	1,359	188	1,282	271
Buffalo, N. Y. ....	803	1,181	731	1,086	292	883	279
Chicago, Ill. ....	482	1,188	355	833	713	432	666
Cleveland, Ohio ....	630	1,087	630	924	405	739	360
Dallas, Tex. ....	420	1,111	862	443	1,374	586	1,299
Denver, Colo. ....	879	1,726	700	1,082	1,631	488	1,579
Detroit, Mich. ....	623	1,152	543	939	482	669	443
El Paso, Tex. ....	976	1,643	1,157	983	1,905	878	1,836
Houston, Tex. ....	484	968	1,056	318	1,420	794	1,341
Indianapolis, Ind. ....	384	1,024	511	712	646	525	585
Kansas City, Mo. ....	369	1,241	413	680	1,097	166	1,038
Los Angeles, Calif. ....	1,603	2,339	1,524	1,673	2,451	1,315	2,394
Louisville, Ky. ....	320	919	605	623	652	580	582
Memphis, Tenn. ....	....	872	699	358	957	529	881
Miami, Fla. ....	872	....	1,511	669	1,092	1,397	1,019
Minneapolis, Minn. ....	699	1,511	....	1,051	1,018	290	985
New Orleans, La. ....	358	1,051	669	....	1,171	847	1,089
New York, N. Y. ....	957	1,092	1,018	1,171	....	1,144	83
Omaha, Nebr. ....	529	1,397	290	847	1,144	....	1,094
Philadelphia, Pa. ....	881	1,019	985	1,089	83	1,094	....
Phoenix, Ariz. ....	1,263	1,982	1,280	1,316	2,145	1,036	2,083
Pittsburgh, Pa. ....	660	1,010	743	919	317	836	259
St. Louis, Mo. ....	240	1,061	466	598	875	354	811
Salt Lake City, Utah ....	1,250	2,089	987	1,434	1,972	833	1,925
San Francisco, Calif. ....	1,802	2,594	1,584	1,926	2,571	1,429	2,523
Seattle, Wash. ....	1,867	2,734	1,395	2,101	2,408	1,369	2,380
Washington, D. C. ....	765	923	934	966	205	1,014	123

Cities	Phoenix	Pittsburgh	St. Louis	Salt Lake City	San Francisco	Seattle	Washington
Birmingham, Ala. ....	1,456	608	400	1,466	2,013	2,082	661
Boston, Mass. ....	2,300	483	1,038	2,099	2,699	2,493	393
Buffalo, N. Y. ....	1,906	178	662	1,699	2,300	2,117	292
Chicago, Ill. ....	1,453	410	262	1,260	1,858	1,737	597
Cleveland, Ohio ....	1,749	115	492	1,568	2,166	2,026	306
Dallas, Tex. ....	887	1,070	547	999	1,483	1,681	1,185
Denver, Colo. ....	586	1,320	796	371	949	1,021	1,494
Detroit, Mich. ....	1,690	205	455	1,492	2,091	1,938	396
El Paso, Tex. ....	346	1,590	1,034	689	995	1,376	1,728
Houston, Tex. ....	1,017	1,137	679	1,200	1,645	1,891	1,220
Indianapolis, Ind. ....	1,499	330	231	1,356	1,949	1,872	494
Kansas City, Mo. ....	1,049	781	238	925	1,506	1,506	945
Los Angeles, Calif. ....	357	2,136	1,589	579	347	959	2,300
Louisville, Ky. ....	1,508	344	242	1,402	1,986	1,943	476
Memphis, Tenn. ....	1,263	660	240	1,250	1,802	1,867	765
Miami, Fla. ....	1,982	1,010	1,061	2,089	2,594	2,734	923
Minneapolis, Minn. ....	1,280	743	466	987	1,584	1,395	934
New Orleans, La. ....	1,316	919	598	1,434	1,926	2,101	966
New York, N. Y. ....	2,145	317	875	1,972	2,571	2,408	205
Omaha, Nebr. ....	1,036	836	354	833	1,429	1,369	1,014
Philadelphia, Pa. ....	2,083	259	811	1,925	2,523	2,380	123
Phoenix, Ariz. ....	....	1,828	1,272	504	653	1,114	1,983
Pittsburgh, Pa. ....	1,828	....	559	1,668	2,264	2,138	192
St. Louis, Mo. ....	1,272	559	....	1,162	1,744	1,724	712
Salt Lake City, Utah ....	504	1,668	1,162	....	600	701	1,848
San Francisco, Calif. ....	653	2,264	1,744	600	....	678	2,442
Seattle, Wash. ....	1,114	2,138	1,724	701	678	....	2,329
Washington, D. C. ....	1,983	192	712	1,848	2,442	2,329	....



## Air Distances Between World Cities

Source: *Encyclopædia Britannica*.

Cities	Berlin	Buenos Aires	Cairo	Calcutta	Capetown	Caracas	Chicago
Berlin, Germany	.....	7,411	1,823	4,400	5,949	5,200	4,458
Buenos Aires, Argentina	7,411	.....	7,428	10,212	4,332	3,108	5,598
Cairo, Egypt	1,823	7,428	.....	3,525	4,476	6,350	6,231
Calcutta, India	4,400	10,212	3,525	.....	6,000	9,583	8,050
Capetown, South Africa	5,949	4,332	4,476	6,000	.....	6,303	8,551
Caracas, Venezuela	5,200	3,108	6,350	9,583	6,303	.....	2,480
Chicago, Ill., U. S.	4,458	5,598	6,231	8,050	8,551	2,480	.....
Hong Kong (Victoria)	5,490	11,400	5,033	1,625	7,309	10,180	7,863
Honolulu, Hawaii	7,384	7,653	8,925	7,075	11,655	6,000	4,315
Istanbul, Turkey	1,068	7,638	780	3,670	5,210	6,020	5,530
Lisbon, Portugal	1,410	5,900	2,365	5,607	5,208	4,038	4,004
London, England	575	6,919	2,218	4,965	5,975	4,641	4,015
Los Angeles, Calif., U. S.	5,849	6,148	7,675	8,208	10,165	3,610	1,741
Manila, Philippines	6,146	11,050	5,678	2,220	7,475	10,554	8,150
Mexico City, Mexico	6,119	4,609	7,807	9,500	8,620	2,222	1,690
Montreal, Canada	3,776	5,619	5,502	7,650	7,975	2,400	750
Moscow, U.S.S.R.	995	8,300	1,725	3,420	6,288	6,185	5,050
New Orleans, La., U. S.	5,182	4,802	6,862	8,754	8,390	1,990	760
New York, N. Y., U. S.	4,026	5,295	5,701	7,920	7,845	2,100	711
Paris, France	540	6,891	2,020	4,900	5,762	4,712	4,219
Rio de Janeiro, Brazil	6,246	1,250	6,242	9,235	3,850	2,742	5,320
San Francisco, Calif., U. S.	5,744	6,487	7,554	7,880	10,340	3,900	1,875
Shanghai, China	5,323	12,295	5,290	2,128	8,179	9,510	7,155
Stockholm, Sweden	503	7,700	2,085	4,177	6,290	5,423	4,347
Sydney, Australia	10,000	7,340	8,900	5,644	6,889	9,498	9,159
Tokyo, Japan	5,623	11,601	6,005	3,210	9,234	8,772	6,410
Warsaw, Poland	320	7,550	1,604	4,044	5,807	5,550	4,721
Washington, D. C., U. S.	4,156	5,100	5,810	8,115	7,888	2,040	594

Cities	Hong Kong	Honolulu	Istanbul	Lisbon	London	Los Angeles	Manila
Berlin, Germany	5,490	7,384	1,068	1,410	575	5,849	6,146
Buenos Aires, Argentina	11,400	7,653	7,638	5,900	6,919	6,148	11,050
Cairo, Egypt	5,033	8,925	780	2,365	2,218	7,675	5,678
Calcutta, India	1,625	7,075	3,670	5,607	4,965	8,208	2,200
Capetown, South Africa	7,309	11,655	5,210	5,208	5,975	10,165	7,475
Caracas, Venezuela	10,180	6,000	6,020	4,038	4,641	3,610	10,554
Chicago, Ill., U. S.	7,863	4,315	5,530	4,004	4,015	1,741	8,150
Hong Kong (Victoria)	.....	5,615	5,000	6,830	6,010	7,345	715
Honolulu, Hawaii	5,615	.....	8,200	7,835	7,320	2,620	5,310
Istanbul, Turkey	5,000	8,200	.....	1,965	1,540	6,895	5,655
Lisbon, Portugal	6,830	7,835	1,965	.....	975	5,650	7,500
London, England	6,010	7,320	1,540	975	.....	5,496	6,680
Los Angeles, Calif., U. S.	7,345	2,620	6,895	5,650	5,496	.....	7,300
Manila, Philippines	715	5,310	5,655	7,500	6,680	7,300	.....
Mexico City, Mexico	8,820	3,846	7,160	5,400	5,605	1,445	8,825
Montreal, Canada	7,820	4,992	4,825	3,256	3,370	2,468	8,175
Moscow, U.S.S.R.	4,425	7,100	1,075	2,427	1,540	6,130	5,075
New Orleans, La., U. S.	8,525	4,805	6,220	4,390	4,656	1,695	8,725
New York, N. Y., U. S.	8,110	5,051	5,060	3,370	3,500	2,466	8,490
Paris, France	6,020	7,525	1,390	895	210	5,711	6,655
Rio de Janeiro, Brazil	10,945	8,400	6,420	4,705	5,747	6,330	11,250
San Francisco, Calif., U. S.	7,030	2,407	6,770	5,685	5,440	345	7,015
Shanghai, China	775	5,009	5,084	6,690	5,841	6,598	1,085
Stockholm, Sweden	5,116	6,955	1,300	1,848	885	5,558	5,760
Sydney, Australia	4,540	4,996	9,258	11,250	10,515	7,450	3,880
Tokyo, Japan	1,850	3,880	5,649	6,925	6,050	5,600	1,867
Warsaw, Poland	5,155	7,438	815	1,700	890	6,048	5,810
Washington, D. C., U. S.	8,245	4,919	5,195	3,558	3,700	2,295	8,560

## Air Distances Between World Cities

Source: *Encyclopaedia Britannica*.

Cities	Mexico City	Montreal	Moscow	New Orleans	New York	Paris	Rio de Janeiro
Berlin, Germany	6,119	3,776	995	5,182	4,026	540	6,246
Buenos Aires, Argentina	4,609	5,619	8,300	4,902	5,295	6,891	1,250
Cairo, Egypt	7,807	5,502	1,725	6,862	5,701	2,020	6,242
Calcutta, India	9,500	7,650	3,420	8,754	7,920	4,900	9,325
Capetown, South Africa	8,620	7,975	6,288	8,390	7,845	5,762	3,850
Caracas, Venezuela	2,222	2,400	6,185	1,990	2,100	4,712	2,742
Chicago, Ill., U. S.	1,690	750	5,050	760	711	4,219	5,320
Hong Kong (Victoria)	8,820	7,820	4,425	8,525	8,110	6,020	10,945
Honolulu, Hawaii	3,846	4,992	7,100	4,305	5,051	7,525	8,400
Istanbul, Turkey	7,160	4,825	1,075	6,220	5,060	1,390	6,420
Lisbon, Portugal	5,400	3,256	2,427	4,390	3,370	895	4,705
London, England	5,605	3,370	1,540	4,656	3,500	210	5,747
Los Angeles, Calif., U. S.	1,445	2,468	6,130	1,695	2,466	5,711	6,330
Manila, Philippines	8,825	8,175	5,075	8,725	8,490	6,655	11,520
Mexico City, Mexico	.....	2,247	6,700	940	2,110	5,800	4,810
Montreal, Canada	2,247	.....	4,445	1,390	340	3,490	5,110
Moscow, U.S.S.R.	6,700	4,445	.....	5,700	4,431	1,538	7,070
New Orleans, La., U. S.	940	1,390	5,700	.....	1,161	4,846	4,798
New York, N. Y., U. S.	2,110	340	4,431	1,161	.....	3,600	4,810
Paris, France	5,800	3,490	1,538	4,846	3,600	.....	5,710
Rio de Janeiro, Brazil	4,810	5,110	7,070	4,798	4,810	5,710	.....
San Francisco, Calif., U. S.	1,870	2,557	5,863	1,960	2,606	5,680	6,655
Shanghai, China	8,120	7,141	4,232	7,830	7,460	5,855	11,510
Stockholm, Sweden	6,000	3,710	770	5,985	3,955	950	6,555
Sydney, Australia	8,005	9,900	8,950	8,950	9,865	10,500	8,425
Tokyo, Japan	7,190	6,546	4,632	6,993	6,846	6,132	11,600
Warsaw, Poland	6,350	4,044	710	5,320	4,260	845	6,363
Washington, D. C., U. S.	1,890	470	4,907	875	204	3,830	4,796

Cities	San Francisco	Shanghai	Stockholm	Sydney	Tokyo	Warsaw	Washington
Berlin, Germany	5,744	5,323	503	10,000	5,623	320	4,156
Buenos Aires, Argentina	6,487	12,295	7,700	7,340	11,601	7,550	5,100
Cairo, Egypt	7,554	5,290	2,085	8,900	6,005	1,604	5,810
Calcutta, India	7,880	2,128	4,177	5,644	3,210	4,044	8,115
Capetown, South Africa	10,340	8,179	6,290	6,889	9,234	5,807	7,888
Caracas, Venezuela	3,900	9,510	5,423	9,498	8,772	5,550	2,040
Chicago, Ill., U. S.	1,875	7,155	4,347	9,159	6,410	4,721	594
Hong Kong (Victoria)	7,030	775	5,116	4,540	1,850	5,155	8,245
Honolulu, Hawaii	2,407	5,009	6,955	4,996	3,880	7,438	4,919
Istanbul, Turkey	6,770	5,084	1,300	9,258	5,649	815	5,195
Lisbon, Portugal	5,685	6,690	1,848	11,250	6,925	1,700	3,558
London, England	5,440	5,841	885	10,515	6,050	890	3,700
Los Angeles, Calif., U. S.	345	6,598	5,558	7,450	5,600	6,048	2,295
Manila, Philippines	7,015	1,085	5,760	3,880	1,867	5,810	8,560
Mexico City, Mexico	1,870	8,120	6,000	8,005	7,195	6,350	1,890
Montreal, Canada	2,557	7,141	3,710	9,900	6,546	4,044	470
Moscow, U.S.S.R.	5,863	4,232	770	8,950	4,632	710	4,907
New Orleans, La., U. S.	1,960	7,830	4,985	8,950	6,993	5,320	875
New York, N. Y., U. S.	2,606	7,460	3,955	9,865	6,846	4,260	204
Paris, France	5,680	5,844	950	10,500	6,132	845	3,830
Rio de Janeiro, Brazil	6,655	11,510	6,555	8,425	11,600	6,363	4,796
San Francisco, Calif., U. S.	.....	6,245	5,450	7,320	5,250	5,918	2,437
Shanghai, China	6,245	.....	4,855	4,814	1,095	4,990	7,509
Stockholm, Sweden	5,450	4,855	.....	9,660	5,110	500	4,160
Sydney, Australia	7,320	4,814	9,660	.....	4,800	9,650	9,755
Tokyo, Japan	5,250	1,095	5,110	4,800	.....	5,356	6,779
Warsaw, Poland	5,918	4,990	500	9,650	5,356	.....	4,488
Washington, D. C., U. S.	2,437	7,509	4,160	9,755	6,779	4,488	.....

# UNITED STATES STATISTICS

## Geographic Data

Source: U. S. Geological Survey.

Highest point: Mt. Whitney, Calif.*	14,495 ft.
Lowest point: Death Valley, Calif.*	282 ft. below sea level
Most northern point: Lake of the Woods projection, Minn.	49° 23' 04.5" N. lat.
Most southern point: Cape Sable, Fla.	25° 07' N. lat.
Most eastern point: West Quoddy Head, Maine	66° 57' W. long.
Most western point: Cape Alava, Wash.	124° 44' W. long.
Places farthest apart: Point Arena, Calif., to West Quoddy Head, Maine	2,897 mi.
Geographic center: near Lebanon, Smith County, Kans.	{ 39° 50' N. lat. 98° 35' W. long.
Northern boundary: Canada and Great Lakes	3,987 mi.
Southern boundary: Mexico	2,013 mi.

\* The highest and lowest points in the U. S. are 86 mi. apart.

## Territorial Expansion of the United States

Accession	Date	Area, sq. mi. <sup>1</sup>
<b>CONTINENTAL UNITED STATES</b>		
Territory in 1790 <sup>2</sup>		888,811
Louisiana Purchase	1803	827,192
Florida	1819	58,560
By treaty with Spain	1819	13,443
Texas	1845	390,144
Oregon	1846	285,580
Mexican Cession	1848	529,017
Gadsden Purchase	1853	29,640
Total		3,022,387

## OUTLYING TERRITORY<sup>3</sup>

Alaska Territory	1867	586,400
Hawaii Territory <sup>4</sup>	1898	6,461
Puerto Rico	1899	3,435
Guam	1899	206
American Samoa	1900	76
Panama Canal Zone	1904	553
Corn Islands <sup>6</sup>	1914	4
Virgin Islands of U. S.	1917	133
Trust territory <sup>5</sup>	1947	8,475
Total		605,743
Aggregate, 1950		3,628,130

<sup>1</sup> Total land and water area.

<sup>2</sup> Includes drainage basin of Red River of the North, not part of any accession, but in the past sometimes considered a part of the Louisiana Purchase.

<sup>3</sup> The Philippine Islands, acquired in 1899, became independent on July 4, 1946.

<sup>4</sup> Includes Baker, Canton, Enderbury, Howland, Jarvis, Johnston, Midway, Swan and Wake Islands; also certain other outlying islands.

<sup>5</sup> Consists of the Mariana, Caroline, and Marshall Islands, formerly held by Japan under mandate.

<sup>6</sup> Leased from Nicaragua for 99 years.

Sources: U. S. Bureau of the Census.

## U. S. Water Area Other Than Inland Water

	Sq. mi.
Atlantic Ocean	2,298
Chesapeake Bay	3,237
Delaware Bay	665
Erie, Lake	5,002
Georgia and Juan de Fuca, Straits of	1,610
Huron, Lake	8,975
Long Island Sound	1,299
Mexico, Gulf of	3,837
Michigan, Lake	22,178
New York Harbor	92
Ontario, Lake	3,033
Pacific Ocean	343
Puget Sound	561
St. Clair, Lake	116
Superior, Lake	21,118
Total	74,364

## U. S. Population and Area

Census	Population of continental U. S.	Increase over the preceding census Number Per cent	Land area, sq. mi.	Pop. per sq. mi.
1790...	3,929,214		867,980	4.5
1800...	5,308,483	1,379,269 35.1	867,980	6.1
1810...	7,239,881	1,931,398 36.4	1,685,865	4.3
1820...	9,638,453	2,398,572 33.1	1,753,588	5.5
1830...	12,866,020	3,227,567 33.5	1,753,588	7.3
1840...	17,069,453	4,203,433 32.7	1,753,588	9.7
1850...	23,191,876	6,122,423 35.9	2,944,377	7.9
1860...	31,443,321	8,251,445 35.6	2,973,965	10.6
1870...	39,818,449	8,375,128 26.6	2,973,965	13.4
1880...	50,155,783	10,337,334 26.0	2,973,965	16.9
1890...	62,947,714	12,791,931 25.5	2,973,965	21.2
1900...	75,994,575	13,046,861 20.7	2,974,159	25.6
1910...	91,972,266	15,977,691 21.0	2,973,890	30.9
1920...	105,710,620	13,738,354 14.9	2,973,776	35.5
1930...	122,775,046	17,064,426 16.1	2,977,128	41.2
1940...	131,669,275	8,894,229 7.2	2,977,128	44.2
1950...	150,697,361	19,028,086 14.5	2,974,726	50.7



# Highest, Lowest, and Average Altitudes in the United States

Source: U. S. Geological Survey.

State	Average elevation, ft.	Highest point	Elevation, ft.	Lowest point	Elevation, ft.
Alabama	500	Cheaha Mountain	2,407	Gulf of Mexico	Sea level
Arizona	4,100	Humphreys Peak	12,670	Colorado River	100
Arkansas	650	Blue Mountain & Magazine Mountain	2,800	Quachita River	55
California	2,900	Mount Whitney	14,495	Death Valley	282*
Colorado	6,800	Mount Elbert	14,431	Arkansas River	3,350
Connecticut	500	N. Bdy.-Mt. Frissell	2,380	Long Island Sound	Sea level
Delaware	60	Centerville	440	Atlantic Ocean	Sea level
D. C.	150	Tenleytown	420	Potomac River	Sea level
Florida	100	Sec. 30, T6N, R20W	345	Atlantic Ocean	Sea level
Georgia	600	Brasstown Bald	4,784	Atlantic Ocean	Sea level
Idaho	5,000	Borah Peak	12,655	Snake River	720
Illinois	600	Charles Mound	1,241	Mississippi River	279
Indiana	700	Greensfork Township	1,240	Ohio River	320
Iowa	1,100	In Osceola County	1,675	Mississippi River	480
Kansas	2,000	In T15S R43W	4,135	Verdigris River	700
Kentucky	750	Big Black Mountain	4,150	Mississippi River	257
Louisiana	100	Driskill Mountain	535	New Orleans	5*
Maine	600	Mount Katahdin	5,268	Atlantic Ocean	Sea level
Maryland	350	Backbone Mountain	3,360	Atlantic Ocean	Sea level
Massachusetts	500	Mount Greylock	3,491	Atlantic Ocean	Sea level
Michigan	900	Porcupine Mountains	2,023	Lake Erie	572
Minnesota	1,200	Misquah Hills	2,230	Lake Superior	602
Mississippi	300	Woodall Mountain	806	Gulf of Mexico	Sea level
Missouri	800	Taum Sauk Mountain	1,772	St. Francis River	230
Montana	3,400	Granite Peak	12,850	Kootenai River	1,800
Nebraska	2,600	Epworth Township	5,340	Southeast corner of State	840
Nevada	5,500	Boundary Peak, White Mountains	13,145	Colorado River	470
New Hampshire	1,000	Mount Washington	6,288	Atlantic Ocean	Sea level
New Jersey	250	High Point	1,801	Atlantic Ocean	Sea level
New Mexico	5,700	Wheeler Peak	13,160	Red Bluff Reservoir	2,817
New York	1,000	Mount Marcy	5,344	Atlantic Ocean	Sea level
North Carolina	700	Mount Mitchell	6,684	Atlantic Ocean	Sea level
North Dakota	1,900	Black Butte	3,468	Red River	750
Ohio	850	Campbell Hill	1,550	Ohio River	433
Oklahoma	1,300	Black Mesa	4,978	Red River	300
Oregon	3,300	Mount Hood	11,245	Pacific Ocean	Sea level
Pennsylvania	500	Mt. Davis, Negro Mountains	3,213	Delaware River	Sea level
Rhode Island	200	Jerimoth Hill	812	Atlantic Ocean	Sea level
South Carolina	350	Sassafras Mountain	3,560	Atlantic Ocean	Sea level
South Dakota	2,200	Harney Peak	7,242	Big Stone Lake	962
Tennessee	900	Clingmans Dome	6,642	Mississippi River	182
Texas	1,700	Guadalupe Peak	8,751	Gulf of Mexico	Sea level
Utah	6,100	Kings Peak	13,498	Beaverdam Creek	2,000
Vermont	1,000	Mount Mansfield	4,393	Lake Champlain	95
Virginia	950	Mount Rogers	5,720	Atlantic Ocean	Sea level
Washington	1,700	Mount Rainier	14,408	Pacific Ocean	Sea level
West Virginia	1,500	Spruce Knob	4,860	Potomac River	240
Wisconsin	1,050	Sugarbush Hill	1,951	Lake Michigan	581
Wyoming	6,700	Gannett Peak	13,785	Belle Fourche River	3,100

\* Below sea level.

## Forest Resources of the United States

Source: U. S. Forest Service.

Nearly 1/3 of the U. S. is forest land including 800 different kinds of trees. Commercial areas include second-growth saw timber, pole-size timber, and seedling and sapling forest. Almost all the old-growth forest is in the West. Noncommercial areas include alpine, semidesert, chaparral and other forest types of low timber productivity, though much of it is important for watershed protection.

### U. S. Forest Land in Acres, 1950

Old growth	44,307,000
Second-growth saw timber	154,597,000
Pole timber	104,799,000
Seedling and sapling area	81,076,000
Poorly stocked and denuded area	74,762,000
Total, commercial forest land	459,541,000
Noncommercial forest	162,525,000
Total, all forest land	622,066,000

# Mountain Peaks in the U. S. Over 14,000 Feet Above Sea Level

Source: U. S. Geological Survey.

Mountain	State	County	Height, feet
Mt. Whitney	California	Tulare-Inyo	14,495
Mt. Elbert	Colorado	Lake	14,431
Mt. Massive	Colorado	Lake	14,418
Mt. Rainier	Washington	Pierce	14,408
Mt. Harvard	Colorado	Chaffee	14,399
Mt. Williamson	California	Inyo	14,384
La Plata Peak	Colorado	Chaffee	14,340
Blanca Peak	Colorado	Costilla-Huerfano-Alamosa	14,310
Uncompahgre Peak	Colorado	Hinsdale	14,301
Crestone Peak	Colorado	Custer-Saguache	14,291
Mt. Lincoln	Colorado	Park	14,284
Grays Peak	Colorado	Clear Creek-Summit	14,274
Torreys Peak	Colorado	Clear Creek-Summit	14,264
Mt. Evans	Colorado	Clear Creek	14,260
Castle Peak	Colorado	Gunnison-Pitkin	14,259
Longs Peak	Colorado	Boulder	14,255
Quandary Peak	Colorado	Summit	14,252
Mt. Wilson	Colorado	Dolores	14,246
Mt. Antero	Colorado	Chaffee	14,245
North Pallsade	California	Fresno	14,242
White Mountain	California	Alpine-Mono	14,242
Mt. Cameron	Colorado	Park	14,238
Mt. Russell	California	Inyo	14,190
Shavano Peak	Colorado	Chaffee	14,179
Mt. Princeton	Colorado	Chaffee	14,177
Mt. Yale	Colorado	Chaffee	14,172
Mt. Bross	Colorado	Park	14,169
Mt. Sill	California	Fresno	14,162
Mt. Shasta	California	Siskiyou	14,161
El Diente	Colorado	Dolores	14,159
Maroon Peak	Colorado	Pitkin	14,158
Point Success	Washington	Pierce	14,150
San Luis Peak	Colorado	Saguache	14,149
Mt. Sneffels	Colorado	Ouray	14,143
Mt. Democrat	Colorado	Park-Lake	14,142
Crestone Needle	Colorado	Custer-Saguache	14,130
Old Baldy	Colorado	Costilla	14,125
Liberty Cap	Washington	Pierce	14,112
Pikes Peak	Colorado	El Paso	14,109
Kit Carson Peak	Colorado	Saguache	14,100
Humboldt Peak	Colorado	Custer	14,100
Windom Peak	Colorado	La Plata	14,091
Mt. Eolus	Colorado	La Plata	14,086
Snowmass Mountain	Colorado	Pitkin-Gunnison	14,077
Mt. Columbia	Colorado	Chaffee	14,070
Culebra Peak	Colorado	Costilla-Las Animas	14,069
Sunlight Peak	Colorado	La Plata	14,060
Split Mountain	California	Fresno-Inyo	14,058
Redcloud Peak	Colorado	Hinsdale	14,050
Mt. Bierstadt	Colorado	Clear Creek	14,048
Mt. Langley	California	Tulare	14,042
Middle Palisade	California	Fresno	14,040
Little Bear Peak	Colorado	Costilla	14,040
Mt. Sherman	Colorado	Park-Lake	14,037
Stewart Peak	Colorado	Saguache	14,032
Mt. Muir	California	Tulare	14,025
Mt. Tyndall	California	Tulare	14,025
Sunshine Peak	Colorado	Hinsdale	14,018
Wetterhorn Peak	Colorado	Hinsdale-Ouray	14,017
Wilson Peak	Colorado	San Miguel	14,017
Handies Peak	Colorado	Hinsdale	14,013
North Maroon Peak	Colorado	Pitkin	14,010
Mt. Barnard	California	Tulare-Inyo	14,003
Pyramid Peak	Colorado	Pitkin	14,000

## Rivers of the U. S.

(300 or more miles long)

**ALABAMA** (315 mi.): From junction of Tallapoosa R. and Coosa R. in Alabama to junction with Tombigbee R. to form Mobile R. and Tensaw R.

**ALLEGHENY** (325 mi.): From Potter Co. in Pennsylvania to junction with Monongahela R. at Pittsburgh to form Ohio R.

**ARKANSAS** (1,450 mi.): From Lake Co. in Colorado to Mississippi R. in Arkansas.

**BIG BLACK** (330 mi.): From Webster Co. in Mississippi to Mississippi R.

**BIG HORN** (336 mi.): From junction of Popo Agie R. and Wind R. in Wyoming to Yellowstone R. in Montana.

**BRAZOS** (870 mi.): From junction of Salt Fork and Clear Fork in Texas to Gulf of Mexico.

**CANADIAN** (906 mi.): From Colfax Co. in New Mexico to Arkansas R. in Oklahoma.

**CEDAR** (329 mi.): From south central Minnesota to Iowa R. in Iowa.

**CHATTAHOOCHEE** (410 mi.): From Towns Co. in Georgia to junction with Flint R. to form Apalachicola R.

**CIMARRON** (600 mi.): From Colfax Co. in New Mexico to Arkansas R. in Oklahoma.

**CLARK FORK** (c. 300 mi.): From Silver Bow Co. in Montana to Pend Oreille Lake in Idaho.

**COLORADO** (1,450 mi.): From Grand Co. in Colorado to Gulf of California in Mexico.

**COLORADO** (840 mi.): From Dawson Co. in Texas to Matagorda Bay.

**COLUMBIA** (1,270 mi.): From Columbia Lake in British Columbia to Pacific Ocean between Oregon and Washington.

**CONNECTICUT** (407 mi.): From Connecticut Lakes in New Hampshire to Long Island Sound in Connecticut.

**CUMBERLAND** (687 mi.): From junction of forks in Harlan Co. in Kentucky to Ohio R.

**DAKOTA** (Sometimes called **JAMES**) (710 mi.): From Wells Co. in North Dakota to Missouri R. in South Dakota.

**DES MOINES** (327 mi.): From junction of forks in Humboldt Co. in Iowa to Mississippi R.

**GILA** (630 mi.): From southwest New Mexico to Colorado R. in Arizona.

**GREEN** (360 mi.): From Lincoln Co. in Kentucky to Ohio R. in Indiana.

**GREEN** (730 mi.): From Sublette Co. in Wyoming to Colorado R. in Utah.

**HUDSON** (306 mi.): From Essex Co. in New York to Upper New York Bay between New York and New Jersey.

**JAMES** (340 mi.): From junction of Jackson R. and Cowpasture R. in Virginia to Chesapeake Bay.

**LITTLE COLORADO** (300 mi.): From Apache Co. in Arizona to Colorado R.

**LITTLE MISSOURI** (560 mi.): From northeast Wyoming to Missouri R. in North Dakota.

**MILK** (625 mi.): From Glacier Co. in Montana to Missouri R.

**MINNESOTA** (332 mi.): From Big Stone Lake between Minnesota and South Dakota to Mississippi R. at St. Paul.

**MISSISSIPPI** (2,470 mi.): From Lake Itasca in Minnesota to Gulf of Mexico in Louisiana.

**MISSOURI** (2,475 mi.): From junction of Jefferson R., Madison R., and Gallatin R. in Montana to Mississippi R. near St. Louis.

**NEOSHO** (460 mi.): From Morris Co. in Kansas to Arkansas R. in Oklahoma.

**NIOBRARA** (431 mi.): From Niobrara Co. in Wyoming to Missouri R. in Nebraska.

**NORTH CANADIAN** (760 mi.): From Union Co. in New Mexico to Canadian R. in Oklahoma.

**NORTH PLATTE** (618 mi.): From Jackson Co. in Colorado to junction with So. Platte R. in Nebraska to form Platte R.

**NUECES** (338 mi.): From near Edwards-Real Co. border in Texas to Nueces Bay.

**OHIO** (981 mi.): From junction of Allegheny R. and Monongahela R. at Pittsburgh to Mississippi R. between Illinois and Kentucky.

**OSAGE** (500 mi.): From junction of Elm Creek and Onion Creek in Kansas to Missouri R. in Missouri.

**OUACHITA** (605 mi.): From Polk Co. in Arkansas to Black R. in Louisiana.

**PEARL** (490 mi.): From Neshoba Co. in Mississippi to Gulf of Mexico between Mississippi and Louisiana.

**PECOS** (735 mi.): From Mora Co. in New Mexico to Rio Grande in Texas.

**PLATTE** (310 mi.): From junction of North Platte R. and South Platte R. in Nebraska to Missouri below Omaha.

**PLATTE** (c. 300 mi.): From Union Co. in Iowa to Missouri R. in Missouri.

**POWDER** (375 mi.): From junction of forks in Johnson Co. in Wyoming to Yellowstone R. in Montana.

**RED** (1,018 mi.): From junction of forks in Tillman Co. in Oklahoma to Mississippi R. in Louisiana.

**RED** (Sometimes called **RED RIVER OF THE NORTH**) (545 mi.): From junction of Otter Tail R. and Bois de Sioux R. in Minnesota to Lake Winnipeg in Manitoba.



**REPUBLICAN** (445 mi.): From eastern Colorado to junction with Smoky Hill R. in Kansas to form Kansas R.

**RIO GRANDE** (1,800 mi.): From San Juan Co. in Colorado to Gulf of Mexico between Texas and Mexico.

**ROANOKE** (380 mi.): From junction of forks in Montgomery Co. in Virginia to Albemarle Sound in North Carolina.

**ROCK** (300 mi.): From Washington Co. in Wisconsin to Mississippi R. in Illinois.

**SABINE** (380 mi.): From junction of forks in Hunt Co. in Texas to Sabine Lake between Texas and Louisiana.

**SACRAMENTO** (382 mi.): From Siskiyou Co. in California to Suisun Bay.

**SAINT FRANCIS** (425 mi.): From Iron Co. in Missouri to Mississippi R. in Arkansas.

**SALMON** (420 mi.): From Custer Co. in Idaho to Snake R.

**SAN JOAQUIN** (350 mi.): From junction of forks in Madera Co. in California to Sacramento R.

**SAN JUAN** (360 mi.): From Archuleta Co. in Colorado to Colorado R. in Utah.

**SAVANNAH** (314 mi.): From junction of Tugaloo R. and Seneca R. in South Carolina to Atlantic Ocean between Georgia and South Carolina.

**SMOKY HILL** (540 mi.): From Cheyenne Co. in Colorado to junction with Republican R. in Kansas to form Kansas R.

**SNAKE** (1,038 mi.): From Yellowstone National Park in Wyoming to Columbia R. in Washington.

**SOUTH PLATTE** (424 mi.): From Park Co. in Colorado to junction with North Platte R. in Nebraska to form Platte R.

**SUSQUEHANNA** (444 mi.): From Otsego Co. in New York to Chesapeake Bay in Maryland.

**TALLAHATCHIE** (301 mi.): From Tippah Co. in Mississippi to junction with Yazoo R. to form Yazoo R.

**TENNESSEE** (652 mi.): From junction of Holston R. and French Broad R. near Knoxville to Ohio R. in Kentucky.

**TOMBIGBEE** (409 mi.): From junction of forks near Amory, Mississippi, to junction with Alabama R. in Alabama to form Mobile R. and Tensaw R.

**TRINITY** (360): From junction of forks in Kaufman Co. in Texas to Galveston Bay.

**WABASH** (475 mi.): From Darke Co. in Ohio to Ohio R. between Illinois and Indiana.

**WASHITA** (500 mi.): From Hemphill Co. in Texas to Red R. in Oklahoma.

**WHITE** (690 mi.): From Madison Co. in Arkansas to Mississippi R.

**WISCONSIN** (430 mi.): From Vilas Co. in Wisconsin to Mississippi R.

**YELLOWSTONE** (671 mi.): From Park Co. in Wyoming to Missouri R. in North Dakota.

## Abbreviations of the States

Alabama	Ala.	Nebraska	Nebr., Neb.
Arizona	Ariz.	Nevada	Nev.
Arkansas	Ark.	New Hampshire	N. H.
California	Calif., Cal.	New Jersey	N. J.
Colorado	Colo., Col.	New Mexico	N. Mex., N. M.
Connecticut	Conn., Ct.	New York	N. Y.
Delaware	Del.	North Carolina	N. C.
District of Columbia	D. C.	North Dakota	N. Dak., N. D.
Florida	Fla.	Ohio	(none), O.
Georgia	Ga.	Oklahoma	Okla.
Idaho	(none), Ida., Id.	Oregon	Oreg., Ore.
Illinois	Ill.	Pennsylvania	Pa., Penn., Penna.
Indiana	Ind.	Rhode Island	R. I.
Iowa	(none), Ia.	South Carolina	S. C.
Kansas	Kans., Kan.	South Dakota	S. Dak., S. D.
Kentucky	Ky.	Tennessee	Tenn.
Louisiana	La.	Texas	Tex.
Maine	(none), Me.	Utah	(none), Ut.
Maryland	Md.	Vermont	Vt.
Massachusetts	Mass.	Virginia	Va.
Michigan	Mich.	Washington	Wash.
Minnesota	Minn.	West Virginia	W. Va.
Mississippi	Miss.	Wisconsin	Wis., Wisc.
Missouri	Mo.	Wyoming	Wyo., Wy.
Montana	Mont.		

NOTE: Where more than one abbreviation is given, the first is the one preferred by the U. S. Post Office Department for use in addresses. The designation (none) means the Department prefers the state not be abbreviated.

## Climate of Selected U. S. Cities

Source: U. S. Weather Bureau.

State and city	Normal average temperatures, F.			Normal annual precipitation, inches	Average annual snowfall, inches	Average annual % possible sunshine	Average annual relative humidity
	Jan.	July	Annual Average				
Alabama: Montgomery.....	49.2	81.2	65.4	53.66	0.6	65	71
Arizona: Phoenix.....	51.3	90.5	69.4	7.16	T	85	42
Arkansas: Little Rock.....	41.8	81.9	62.4	47.38	4.6	62	71
California: Los Angeles.....	53.2	67.6	60.9	12.37	T	73	68
San Francisco.....	47.9	60.4	55.6	17.43	T	65	78
Colorado: Denver.....	28.7	72.8	49.8	14.20	56.2	67	50
Connecticut: Hartford.....	27.0	72.7	49.7	42.43	40.2	56	72
Delaware: Wilmington.....	33.3	75.9	54.2	44.50	17.0	..	75
D. C.: Washington.....	36.2	77.3	56.5	40.48	19.8	58	67
Florida: Miami.....	68.3	82.6	75.7	56.41	T	66	76
Georgia: Atlanta.....	44.6	79.5	62.2	49.16	2.3	60	69
Idaho: Boise.....	27.3	74.8	50.8	11.48	22.3	64	59
Illinois: Chicago.....	24.9	74.6	50.1	32.72	33.7	59	71
Indiana: Indianapolis.....	28.8	76.0	52.5	39.69	20.3	57	70
Iowa: Des Moines.....	22.1	76.2	50.2	30.74	32.1	61	71
Kansas: Wichita.....	32.0	80.9	57.0	30.70	14.0	69	66
Kentucky: Louisville.....	34.9	77.9	56.5	41.47	13.6	56	69
Louisiana: New Orleans.....	54.9	81.8	69.1	59.65	0.2	59	75
Maine: Portland.....	20.7	67.8	44.5	41.78	71.1	59	77
Maryland: Baltimore.....	34.2	76.3	54.7	42.59	21.9	59	68
Massachusetts: Boston.....	29.1	72.2	50.7	38.76	42.3	57	67
Michigan: Detroit.....	26.2	73.1	49.3	31.03	39.4	53	71
Sault Ste. Marie.....	13.8	63.9	39.3	30.19	83.4	47	77
Minnesota: Minneapolis-St. Paul.....	14.6	74.1	45.6	24.71	42.4	56	68
Mississippi: Vicksburg.....	49.2	81.5	66.1	49.63	1.7	63	74
Missouri: St. Louis.....	32.2	79.7	56.3	36.73	17.3	59	68
Montana: Helena.....	17.6	68.0	43.0	11.30	54.1	60	59
Nebraska: North Platte.....	24.0	75.8	49.5	17.54	25.4	68	68
Omaha.....	23.0	78.5	51.6	25.90	28.3	63	67
Nevada: Las Vegas.....	44.2	90.5	66.8	4.35	1.3	82	31
New Hampshire: Concord.....	20.1	69.0	44.8	37.23	68.3	52	74
New Jersey: Atlantic City.....	35.8	73.6	54.1	41.77	14.4	60	78
New Mexico: Albuquerque.....	33.7	79.0	56.6	8.68	8.6	76	45
New York: Buffalo.....	25.5	70.6	47.5	32.29	74.3	53	76
New York.....	32.9	74.6	53.4	40.38	30.5	59	70
Syracuse.....	25.5	72.5	48.8	36.42	81.4	50	73
North Carolina: Asheville.....	39.4	73.8	56.3	37.22	11.0	58	76
Raleigh.....	41.4	78.5	59.9	46.18	6.9	61	72
North Dakota: Bismarck.....	9.2	72.1	41.7	15.40	35.6	58	68
Ohio: Cleveland.....	28.5	73.7	50.6	32.08	42.2	50	71
Columbus.....	29.7	74.4	52.0	37.88	21.6	55	74
Oklahoma: Oklahoma City.....	37.1	82.1	60.4	30.22	7.8	68	66
Oregon: Portland.....	37.4	67.3	53.0	35.23	12.6	48	75
Pennsylvania: Harrisburg.....	31.1	75.4	53.0	36.01	31.4	59	67
Philadelphia.....	33.2	76.3	54.3	41.13	21.4	58	70
Pittsburgh.....	33.0	75.4	53.9	36.23	34.4	51	68
Rhode Island: Providence.....	28.7	71.0	49.4	39.63	32.9	58	74
South Carolina: Charleston.....	50.3	80.1	65.2	48.14	0.2	66	77
South Dakota: Huron.....	13.5	75.4	45.7	17.54	29.8	63	70
Tennessee: Nashville.....	39.9	80.0	60.1	45.03	8.4	59	70
Texas: El Paso.....	43.4	81.3	63.3	7.83	2.6	80	40
Fort Worth.....	45.2	84.6	65.9	32.29	2.5	68	64
Houston.....	53.3	82.6	68.9	46.93	0.2	59	75
Utah: Salt Lake City.....	26.5	76.6	51.3	14.74	55.1	68	57
Vermont: Burlington.....	17.9	70.4	44.5	32.22	64.7	46	74
Virginia: Richmond.....	38.3	77.5	57.7	42.89	12.5	61	71
Washington: Seattle.....	40.7	65.6	53.2	31.92	11.4	46	75
Spokane.....	24.9	69.6	47.1	14.92	38.2	58	64
West Virginia: Parkersburg.....	34.4	75.7	54.9	39.11	24.4	49	74
Wisconsin: Madison.....	19.1	73.0	46.6	30.00	38.2	54	72
Wyoming: Cheyenne.....	25.5	68.1	44.9	16.25	56.6	66	56

NOTE: T indicates trace.

## Coastline of the United States

Source: U. S. Coast and Geodetic Survey.

State	Lengths in statute miles		
	General coastline*	Tidal shoreline, general†	Tidal shoreline, detailed‡
Maine.....	228	676	3,478
New Hampshire.....	13	14	131
Massachusetts.....	192	453	1,519
Rhode Island.....	40	156	384
Connecticut.....	...	96	618
New York.....	127	470	1,850
New Jersey.....	130	398	1,792
Pennsylvania.....	...	...	89
Delaware.....	28	79	381
Maryland.....	31	452	3,190
Virginia.....	112	567	3,315
North Carolina.....	301	1,030	3,375
South Carolina.....	187	758	2,876
Georgia.....	100	603	2,344
Florida (Atlantic).....	399	618	3,035
Total Atlantic coast.....	1,888	6,370	28,377
Florida (Gulf).....	798	1,658	5,391
Alabama.....	53	199	607
Mississippi.....	44	155	359
Louisiana.....	397	985	7,721
Texas.....	367	1,100	3,359
Total Gulf coast.....	1,659	4,097	17,437
California.....	840	1,190	3,427
Oregon.....	296	312	1,410
Washington.....	157	908	3,026
Total Pacific coast.....	1,293	2,410	7,863
Total U. S.....	4,840	12,877	53,677

\* Figures are lengths of general outline of seacoast. Measurements made with unit measure of 30 minutes of latitude on charts as near scale of 1:1,200,000 as possible. Shoreline of bays and sounds is included to point where they narrow to width of unit measure, and distance across at such point is included. † Measurements made with unit measure of 3 statute miles on charts of 1:200,000 and 1:400,000 scale when available. Shoreline of bays, sounds and other bodies of water included to point where they narrow to width of 3 statute miles, and distance across at such point is included. ‡ Figures obtained in 1939-40 with recording measure on largest scale maps and charts then available. Shoreline of bays, sounds and other bodies of water included to head of tide-water, or to point where they narrow to width of 100 feet.

## Arrival and Departure of Aliens

Source: Immig. &amp; Naturalisation Service.

Year	Aliens admitted *	Aliens departed †	Excess of admissions	Aliens excluded	Aliens departed
1921.....	978,163	426,031	552,132	13,779	4,517
1922.....	432,505	345,384	87,121	13,731	4,345
1923.....	673,406	200,586	472,820	20,619	3,661
1924.....	879,302	216,745	662,557	30,284	6,409
1925.....	458,435	225,490	232,945	25,390	9,495
1926.....	496,106	227,755	268,351	20,550	10,904
1927.....	538,001	253,508	284,493	19,755	11,662
1928.....	500,631	274,356	226,275	18,839	11,625
1929.....	479,327	252,498	226,829	18,127	12,908
1930.....	446,214	272,425	173,789	8,233	16,631
1931.....	280,679	290,916	-10,237	9,744	18,142
1932.....	174,871	287,657	-112,786	7,064	19,426
1933.....	150,728	243,802	-93,074	5,527	19,865
1934.....	163,904	177,172	-13,268	5,384	8,879
1935.....	179,721	189,050	-9,329	5,558	8,319
1936.....	190,899	193,284	-2,385	7,000	9,195
1937.....	231,884	224,582	7,302	8,076	8,829
1938.....	252,697	222,614	30,083	8,066	9,275
1939.....	268,331	201,409	66,922	6,498	8,202
1940.....	208,788	166,164	42,624	5,300	6,954
1941.....	151,784	88,477	63,307	2,929	4,407
1942.....	111,238	74,552	36,686	1,833	3,709
1943.....	104,842	58,722	46,120	1,495	4,207
1944.....	142,192	84,409	57,783	1,642	7,179
1945.....	202,366	93,362	109,004	2,341	11,270
1946.....	312,190	204,353	107,837	2,942	14,375
1947.....	513,597	323,422	190,175	4,771	18,663
1948.....	646,576	448,218	198,358	4,905	20,371
1949.....	635,589	430,089	205,500	3,834	20,040
1950.....	676,024	456,689	219,335	3,571	6,628
1951.....	670,823	472,901	197,922	3,784	13,544
1952.....	781,602	509,497	272,105	2,944	20,181
1953.....	656,148	544,502	111,646	5,647‡	19,845

\* Immigrants and nonimmigrants. † Emigrants and nonemigrants. ‡ Including border crossers.

## Estimated Population of the U. S., 1950-54

Source: U. S. Bureau of the Census.

Date	Civilian only	Including armed forces in U. S.	Including armed forces overseas *	Date	Civilian only	Including armed forces in U. S.	Including armed forces overseas
Jan. 1, 1950.....	148,980,000	150,085,000	150,552,000	June 1, 1953.....	155,834,000	158,119,000	159,410,000
Apr. 1, 1950.....	149,634,000	150,637,361	151,132,000	July 1, 1953.....	156,039,000	158,306,000	159,629,000
July 1, 1950.....	150,202,000	151,234,000	151,683,000	Aug. 1, 1953.....	156,296,000	158,511,000	159,889,000
Jan. 1, 1951.....	150,689,000	152,361,000	153,072,000	Sept. 1, 1953.....	156,572,000	158,781,000	160,154,000
July 1, 1951.....	151,082,000	153,384,000	154,360,000	Oct. 1, 1953.....	156,864,000	159,036,000	160,408,000
Jan. 1, 1952.....	152,292,000	154,649,000	155,790,000	Nov. 1, 1953.....	157,137,000	159,296,000	160,654,000
July 1, 1952.....	153,360,000	155,755,000	157,022,000	Dec. 1, 1953.....	157,381,000	159,538,000	160,873,000
Jan. 1, 1953.....	154,880,000	157,166,000	158,423,000	Jan. 1, 1954.....	157,648,000	.....	161,100,000
Feb. 1, 1953.....	155,074,000	157,315,000	158,623,000	Feb. 1, 1954.....	157,917,000	.....	161,331,000
Mar. 1, 1953.....	155,258,000	157,471,000	158,804,000	Mar. 1, 1954.....	158,149,000	.....	161,542,000
Apr. 1, 1953.....	155,463,000	157,721,000	159,017,000	Apr. 1, 1954.....	158,388,000	.....	161,763,000
May 1, 1953.....	155,643,000	157,898,000	159,202,000	May 1, 1954.....	158,608,000	.....	161,969,000

<sup>1</sup> Census figure minus estimate of armed forces in continental U. S. <sup>2</sup> Census figure. <sup>3</sup> Census figure plus estimate of armed forces overseas. NOTE: All estimated figures are provisional.



## Population and Area of Major U. S. Cities

(over 50,000 population in 1950)

Source: U. S. Bureau of the Census.

City	1910 population	1920 population	1930 population	1940 population	1950 population	1950 rank	Area sq. mi.*
Akron, Ohio.....	69,067	208,435	255,040	244,791	274,605	39	53.7
Alameda, Calif.....	23,383	28,806	35,033	36,256	64,430	184	10.7
Albany, N. Y.....	100,253	113,344	127,412	130,577	134,995	68	19.0
Albuquerque, N. Mex.....	11,020	15,157	26,570	35,449	96,815	112	47.9
Alexandria, Va.....	15,329	18,060	24,149	33,523	61,787	192	7.5
Alhambra, Calif.....	5,021	9,096	29,472	38,935	51,359	224	7.0
Allentown, Pa.....	51,913	73,502	92,563	96,904	106,756	99	15.9
Altoona, Pa.....	52,127	60,331	82,054	80,214	77,177	150	10.0
Amarillo, Tex.....	9,957	15,494	43,132	51,686	74,246	155	20.9
Asheville, N. C.....	18,762	28,504	50,193	51,310	53,000	215	14.5
Atlanta, Ga.....	154,839	200,616	270,366	302,288	331,314	33	36.9
Atlantic City, N. J.....	46,150	50,707	66,198	64,094	61,657	193	11.5
Augusta, Ga.....	41,040	52,548	60,342	65,919	71,508	165	9.8
Aurora, Ill.....	29,807	36,397	46,589	47,170	50,576	230	8.1
Austin, Tex.....	29,860	34,876	53,120	87,930	132,459	72	32.1
Baltimore, Md.....	558,485	733,826	804,874	859,100	949,708	6	78.7
Baton Rouge, La.....	14,897	21,782	30,729	34,719	125,629	81	30.2
Bay City, Mich.....	45,166	47,554	47,355	47,956	52,523	218	9.6
Bayonne, N. J.....	55,545	76,754	88,979	79,198	77,203	149	5.2
Beaumont, Tex.....	20,640	40,422	57,732	59,061	94,014	118	31.4
Berkeley, Calif.....	40,434	56,036	82,109	85,547	113,805	90	9.5
Berwyn, Ill.....	5,841	14,150	47,027	48,451	51,280	225	3.8
Bethlehem, Pa.....	12,837	50,358	57,892	58,490	66,340	176	18.6
Binghamton, N. Y.....	48,443	66,800	76,662	78,309	80,674	139	10.1
Birmingham, Ala.....	132,685	178,806	259,678	267,583	326,037	34	65.3
Boston, Mass.....	670,585	748,060	781,188	770,816	801,444	10	47.8
Bridgeport, Conn.....	102,054	143,555	146,716	147,121	158,709	63	14.6
Brockton, Mass.....	56,878	66,254	63,797	62,343	62,860	191	21.4
Buffalo, N. Y.....	423,715	506,775	573,076	575,901	580,132	15	39.4
Burbank, Calif.....	.....	2,913	16,662	34,337	78,577	146	16.8
Cambridge, Mass.....	104,839	109,694	113,643	110,879	120,740	86	6.2
Camden, N. J.....	94,538	116,309	118,700	117,536	124,555	85	8.6
Canton, Ohio.....	50,217	87,091	104,906	108,401	116,912	88	14.1
Cedar Rapids, Iowa.....	32,811	45,566	56,097	62,120	72,296	161	25.4
Charleston, S. C.....	58,833	67,957	62,265	71,275	70,174	170	5.1
Charleston, W. Va.....	22,996	39,608	60,408	67,914	73,501	159	9.6
Charlotte, N. C.....	34,014	46,338	82,675	100,899	134,042	69	30.0
Chattanooga, Tenn.....	44,604	57,895	119,798	128,163	131,041	73	28.0
Chester, Pa.....	38,537	58,030	59,164	59,285	66,039	179	4.7
Chicago, Ill.....	2,185,283	2,701,705	3,376,438	3,396,808	3,620,962	2	207.5
Cicero, Ill.....	14,557	44,995	66,602	64,712	67,544	173	5.8
Cincinnati, Ohio.....	363,591	401,247	451,160	455,610	503,998	18	75.1
Cleveland, Ohio.....	560,663	796,841	900,429	878,336	914,808	7	75.0
Cleveland Heights, Ohio.....	2,955	15,236	50,945	54,992	59,141	198	8.2
Clifton, N. J.....	.....	26,470	46,875	48,827	64,511	182	11.7
Columbia, S. C.....	26,319	37,524	51,581	62,396	86,914	129	12.8
Columbus, Ga.....	20,554	31,125	43,131	53,280	79,611	142	12.0
Columbus, Ohio.....	181,511	237,031	290,564	306,087	375,901	28	39.4
Corpus Christi, Tex.....	8,222	10,522	27,741	57,301	108,287	97	21.5
Covington, Ky.....	53,270	57,121	65,252	62,018	64,452	183	6.4
Cranton, R. I.....	21,107	29,407	42,911	47,085	55,060	210	28.7
Dallas, Tex.....	92,104	158,976	260,475	294,734	434,462	22	112.0
Davenport, Iowa.....	43,028	56,727	60,751	66,039	74,549	152	18.1
Dayton, Ohio.....	116,577	152,559	200,982	210,718	243,872	44	25.0
Dearborn, Mich.....	911	2,470	50,358	63,584	94,994	117	25.3
Decatur, Ill.....	31,140	43,818	57,510	59,305	66,269	177	9.3
Denver, Colo.....	213,381	256,491	287,861	322,412	415,786	24	66.8
Des Moines, Iowa.....	86,368	126,468	142,559	159,819	177,965	53	54.9
Detroit, Mich.....	465,766	993,678	1,568,662	1,623,452	1,849,568	5	139.6
Duluth, Minn.....	78,917	98,917	101,463	101,065	104,511	102	62.3
Durham, N. C.....	18,241	21,719	52,037	60,195	71,311	166	13.2
East Chicago, Ind.....	19,098	35,967	54,784	54,637	54,263	213	10.4
East Orange, N. J.....	34,371	50,710	68,020	68,945	79,340	143	3.9
East St. Louis, Ill.....	58,547	66,767	74,347	75,609	82,295	135	13.4

City	1910 population	1920 population	1930 population	1940 population	1950 population	1950 rank	Area, sq. mi.*
El Paso, Tex.	39,279	77,560	102,421	96,810	130,485	75	25.6
Elizabeth, N. J.	73,409	95,783	114,589	109,912	112,817	91	11.7
Erie, Pa.	66,525	93,372	115,967	116,955	130,803	74	18.8
Evanston, Ill.	24,978	37,234	63,338	65,389	73,641	158	8.2
Evansville, Ind.	69,647	85,264	102,249	97,062	128,636	78	18.0
Fall River, Mass.	119,295	120,485	115,274	115,428	111,963	92	33.9
Flint, Mich.	38,550	91,599	156,492	151,543	163,143	60	29.3
Fort Wayne, Ind.	63,933	86,549	114,946	118,410	133,607	71	18.8
Fort Worth, Tex.	73,312	106,482	163,447	177,662	278,778	38	93.7
Fresno, Calif.	24,892	45,086	52,513	60,685	91,669	124	15.0
Gadsden, Ala.	10,557	14,737	24,042	36,975	55,725	207	27.2
Galveston, Tex.	36,981	44,255	52,938	60,862	66,568	175	8.1
Gary, Ind.	16,802	55,378	100,426	111,719	133,911	70	41.6
Glendale, Calif.	2,746	13,536	62,736	82,582	95,702	115	20.3
Grand Rapids, Mich.	112,571	137,634	168,592	164,292	176,515	55	23.4
Green Bay, Wis.	25,236	31,017	37,415	46,235	52,735	216	13.9
Greensboro, N. C.	15,895	19,861	53,569	59,319	74,389	153	18.2
Greenville, S. C.	15,741	23,127	29,154	34,734	58,161	201	16.2
Hamilton, Ohio	35,279	39,675	52,176	50,592	57,951	202	7.6
Hammond, Ind.	20,925	36,004	64,560	70,184	87,594	128	23.5
Harrisburg, Pa.	64,186	75,917	80,339	83,893	89,544	126	6.3
Hartford, Conn.	98,915	138,036	164,072	166,267	177,397	54	17.4
Hoboken, N. J.	70,324	68,166	59,261	50,115	50,676	229	1.0
Holyoke, Mass.	57,730	60,203	56,537	53,750	54,661	211	21.0
Houston, Tex.	78,800	138,276	292,352	384,514	596,163	14	160.0
Huntington, W. Va.	31,161	50,177	75,572	78,836	86,353	130	14.0
Indianapolis, Ind.	233,650	314,194	364,161	386,972	427,173	23	55.2
Irrington, N. J.	11,877	25,480	56,733	55,328	59,201	197	3.1
Jackson, Mich.	31,433	48,374	55,187	49,656	51,088	228	10.2
Jackson, Miss.	21,262	22,817	48,282	62,107	98,271	110	27.0
Jacksonville, Fla.	57,699	91,558	129,549	173,065	204,517	49	30.2
Jersey City, N. J.	267,779	298,103	316,715	301,173	299,017	37	13.0
Johnstown, Pa.	55,482	67,327	66,993	66,668	63,232	189	5.6
Joliet, Ill.	34,670	38,442	42,993	42,365	51,601	222	7.7
Kalamazoo, Mich.	39,437	48,487	54,786	54,097	57,704	203	8.8
Kansas City, Kans.	82,331	101,177	121,857	121,458	129,553	76	18.7
Kansas City, Mo.	248,381	324,410	399,746	399,178	456,622	20	80.6
Kenosha, Wis.	21,371	40,472	50,262	48,765	54,368	212	7.6
Knoxville, Tenn.	36,346	77,818	105,802	111,580	124,769	83	25.4
Lakewood, Ohio	15,181	41,732	70,509	69,160	68,071	171	5.6
Lancaster, Pa.	47,227	53,150	59,949	61,345	63,774	186	4.3
Lansing, Mich.	31,229	57,327	78,397	78,753	92,129	121	14.1
Laredo, Tex.	14,855	22,710	32,618	39,274	51,910	221	13.5
Lawrence, Mass.	85,892	94,270	85,068	84,323	80,536	140	6.7
Lexington, Ky.	35,099	41,534	45,736	49,304	55,534	209	5.7
Lima, Ohio	30,508	41,326	42,287	44,711	50,246	231	7.7
Lincoln, Nebr.	43,973	54,948	75,933	81,984	98,884	109	23.8
Little Rock, Ark.	45,941	65,142	81,679	88,039	102,213	105	21.0
Long Beach, Calif.	17,809	55,593	142,032	164,271	250,767	41	34.7
Lorain, Ohio	28,883	37,295	44,512	44,125	51,202	226	11.0
Los Angeles, Calif.	319,198	576,673	1,238,048	1,504,277	1,970,358	4	450.9
Louisville, Ky.	223,928	234,891	307,745	319,077	369,129	30	39.9
Lowell, Mass.	106,294	112,759	100,234	101,389	97,249	111	12.9
Lubbock, Tex.	1,938	4,051	20,520	31,853	71,747	163	17.0
Lynn, Mass.	89,336	99,148	102,320	98,123	99,738	107	10.4
McKeesport, Pa.	42,694	46,781	54,632	55,355	51,502	223	3.5
Macon, Ga.	40,665	52,995	53,829	57,865	70,252	169	12.0
Madison, Wis.	25,531	38,378	57,899	67,447	96,056	114	15.4
Malden, Mass.	44,404	49,103	58,036	58,010	59,804	195	4.8
Manchester, N. H.	70,063	78,884	76,834	77,685	82,732	134	32.1
Medford, Mass.	23,150	39,038	59,714	63,083	66,113	178	8.1
Memphis, Tenn.	131,105	162,351	253,143	292,942	396,000	26	104.2
Miami, Fla.	5,471	29,571	110,637	172,172	249,276	42	34.2
Milwaukee, Wis.	373,857	457,147	578,249	587,472	637,392	13	50.0
Minneapolis, Minn.	301,408	380,582	464,356	492,370	521,718	17	53.8
Mobile, Ala.	51,521	60,777	68,202	78,720	129,009	77	25.4
Montgomery, Ala.	38,136	43,464	66,079	78,084	106,525	100	26.1
Mount Vernon, N. Y.	30,919	42,726	61,499	67,362	71,899	162	4.1
Muncie, Ind.	24,005	36,524	46,548	49,720	58,479	200	10.0
Nashville, Tenn.	110,364	118,342	153,866	167,402	174,307	56	22.0

City	1910 population	1920 population	1930 population	1940 population	1950 population	1950 rank	Area, sq. mi.*
New Bedford, Mass.....	96,652	121,217	112,597	110,341	109,189	96	19.1
New Britain, Conn.....	43,916	59,316	68,128	68,685	73,726	156	13.7
New Haven, Conn.....	133,605	162,537	162,655	160,605	164,443	59	17.9
New Orleans, La.....	339,075	387,219	458,762	494,537	570,445	16	199.4
New Rochelle, N. Y.....	28,867	36,213	54,000	58,408	59,725	196	9.9
New York, N. Y.....	4,766,883	5,620,048	6,930,446	7,454,995	7,891,957	1	315.1
Bronx borough.....	430,980	732,016	1,265,258	1,394,711	1,451,277	...	43.4
Brooklyn borough.....	1,634,351	2,018,356	2,560,401	2,698,285	2,738,175	...	76.1
Manhattan borough.....	2,331,542	2,284,103	1,867,312	1,889,924	1,960,101	...	22.3
Queens borough.....	284,041	469,042	1,079,129	1,297,634	1,550,849	...	113.0
Richmond borough.....	85,969	116,531	158,346	174,441	191,555	...	60.3
Newark, N. J.....	347,469	414,524	442,337	429,760	438,776	21	23.6
Newton, Mass.....	39,806	46,054	65,276	69,873	81,994	136	17.3
Niagara Falls, N. Y.....	30,445	50,760	75,460	78,029	90,872	125	12.7
Norfolk, Va.....	67,452	115,777	129,710	144,332	213,513	48	28.2
Oak Park, Ill.....	19,444	39,858	63,982	66,015	63,529	188	4.7
Oakland, Calif.....	150,174	216,261	284,063	302,163	384,575	27	53.0
Ogden, Utah.....	25,580	32,804	40,272	43,688	57,112	206	16.6
Oklahoma City, Okla.....	64,205	91,295	185,389	204,424	243,504	45	50.8
Omaha, Nebr.....	124,096	191,601	214,006	223,844	251,117	40	40.7
Orlando, Fla.....	3,894	9,282	27,330	36,736	52,367	219	14.1
Pasadena, Calif.....	30,291	45,354	76,086	81,864	104,577	101	21.3
Passaic, N. J.....	54,773	63,841	62,959	61,394	57,702	204	3.1
Pateron, N. J.....	125,600	135,875	138,513	139,656	139,336	66	8.1
Pawtucket, R. I.....	51,622	64,248	77,149	75,797	81,436	138	8.6
Peoria, Ill.....	66,950	76,121	104,969	105,087	111,856	93	12.9
Philadelphia, Pa.....	1,549,008	1,823,779	1,950,961	1,931,334	2,071,605	3	127.2
Phoenix, Ariz.....	11,134	29,053	48,118	65,414	106,818	98	17.1
Pittsburgh, Pa.....	533,905	588,343	669,817	671,659	676,806	12	54.2
Pittsfield, Mass.....	32,121	41,763	49,677	49,684	53,348	214	40.9
Pontiac, Mich.....	14,532	34,273	64,928	66,626	73,681	157	19.8
Port Arthur, Tex.....	7,663	22,251	50,902	46,140	57,530	205	12.2
Portland, Maine.....	58,571	69,272	70,810	73,643	77,634	148	21.6
Portland, Oreg.....	207,214	258,288	301,815	305,394	373,628	29	64.1
Portsmouth, Va.....	33,190	54,387	45,704	50,745	80,039	141	10.2
Providence, R. I.....	224,326	237,595	252,981	253,504	248,674	43	17.9
Pueblo, Colo.....	41,747	43,050	50,096	52,162	63,685	187	10.6
Quincy, Mass.....	32,642	47,876	71,983	75,810	83,835	133	16.8
Racine, Wis.....	38,002	58,593	67,542	67,195	71,193	167	9.2
Raleigh, N. C.....	19,218	24,418	37,379	46,897	65,679	180	11.0
Reading, Pa.....	96,071	107,784	111,171	110,568	109,320	95	8.8
Richmond, Calif.....	6,802	16,843	20,093	23,642	99,545	108	14.5
Richmond, Va.....	127,628	171,667	182,929	193,042	230,310	46	37.1
Roanoke, Va.....	34,874	50,842	69,206	69,287	91,921	122	26.5
Rochester, N. Y.....	218,149	295,750	328,132	324,975	332,488	32	36.0
Rockford, Ill.....	45,401	65,651	85,864	84,637	92,927	119	14.0
Sacramento, Calif.....	44,696	65,908	93,750	105,958	137,572	67	16.9
Saginaw, Mich.....	50,510	61,903	80,715	82,794	92,918	120	16.6
St. Joseph, Mo.....	77,403	77,939	80,935	75,711	78,588	145	14.1
St. Louis, Mo.....	687,029	772,897	821,966	816,048	856,796	8	61.0
St. Paul, Minn.....	214,744	234,698	271,606	287,736	311,349	35	52.2
St. Petersburg, Fla.....	4,127	14,237	40,425	60,812	96,738	113	52.2
Salt Lake City, Utah.....	92,777	118,110	140,267	149,934	182,121	52	53.9
San Angelo, Tex.....	10,321	10,050	25,308	25,802	52,093	220	28.8
San Antonio, Tex.....	96,614	161,379	231,542	253,854	408,442	25	69.5
San Bernardino, Calif.....	12,779	18,721	37,481	43,646	63,058	190	19.5
San Diego, Calif.....	39,578	74,361	147,995	203,341	334,387	31	99.4
San Francisco, Calif.....	416,912	506,676	634,394	634,536	775,357	11	44.6
San Jose, Calif.....	28,946	39,642	57,651	68,457	95,280	116	17.0
Santa Monica, Calif.....	7,847	15,252	37,146	53,500	71,595	164	8.0
Savannah, Ga.....	65,064	83,252	85,024	95,996	119,638	87	14.6
Schenectady, N. Y.....	72,826	88,723	95,692	87,549	91,785	123	10.2
Scranton, Pa.....	129,867	137,783	143,433	140,404	125,536	82	24.9
Seattle, Wash.....	237,194	315,312	365,583	368,302	467,591	19	70.8
Shreveport, La.....	28,015	43,874	76,655	98,167	127,206	80	24.0
Sioux City, Iowa.....	47,828	71,227	79,183	82,364	83,991	132	45.0
Sioux Falls, S. Dak.....	14,094	25,202	33,362	40,832	52,696	217	12.7
Somerville, Mass.....	77,236	93,091	103,908	102,177	102,351	104	4.1
South Bend, Ind.....	53,684	70,983	104,193	101,268	115,911	89	20.2
South Gate, Calif.....	.....	.....	19,632	26,945	51,116	227	7.0



City	1910 population	1920 population	1930 population	1940 population	1950 population	1950 rank	Area; sq. mi.*
Spokane, Wash.	104,402	104,437	115,514	122,001	161,721	62	41.5
Springfield, Ill.	51,678	59,183	71,864	75,503	81,628	137	10.4
Springfield, Mass.	88,926	129,614	149,900	149,554	162,399	61	31.7
Springfield, Mo.	35,201	39,631	57,527	61,238	66,731	174	13.6
Springfield, Ohio	46,921	60,840	68,743	70,662	78,508	147	12.1
Stamford, Conn.	25,138	35,096	46,346	47,938	74,293	154	37.6
Stockton, Calif.	23,253	40,296	47,963	54,714	70,853	168	11.8
Syracuse, N. Y.	137,249	171,717	209,326	205,967	220,583	47	25.3
Tacoma, Wash.	83,743	96,965	106,817	109,408	143,673	65	47.9
Tampa, Fla.	37,782	51,608	101,161	108,391	124,681	84	19.0
Terre Haute, Ind.	58,157	66,083	62,810	62,693	64,214	185	12.2
Toledo, Ohio	168,497	243,164	290,718	282,349	303,616	36	38.3
Topeka, Kans.	43,684	50,022	64,120	67,833	78,791	144	12.5
Trenton, N. J.	96,815	119,289	123,356	124,697	128,009	79	7.2
Troy, N. Y.	76,813	71,996	72,763	70,304	72,311	160	9.3
Tulsa, Okla.	18,182	72,075	141,258	142,157	182,740	51	26.7
Union City, N. J.	21,023	20,651	58,659	56,173	55,537	208	1.3
Utica, N. Y.	74,419	94,156	101,740	100,518	101,531	106	15.8
Waco, Tex.	26,425	38,500	52,848	55,982	84,706	131	26.0
Washington, D. C.	331,069	437,571	486,869	663,091	802,177	9	61.4
Waterbury, Conn.	73,141	91,715	99,902	99,314	104,477	103	27.6
Waterloo, Iowa	26,693	36,230	46,191	51,743	65,198	181	31.3
Wheeling, W. Va.	41,641	56,208	61,659	61,099	58,891	199	10.4
Wichita, Kans.	52,450	72,217	111,110	114,966	168,279	58	25.7
Wichita Falls, Tex.	8,200	40,079	43,690	45,112	68,042	172	14.1
Wilkes-Barre, Pa.	67,105	73,833	86,626	86,236	76,826	151	6.9
Wilmington, Del.	87,411	110,168	106,597	112,504	110,356	94	9.8
Winston-Salem, N. C.	22,700	48,395	75,274	79,815	87,811	127	18.8
Woonsocket, R. I.	38,125	49,496	49,376	49,303	50,211	232	8.6
Worcester, Mass.	145,986	179,754	195,311	193,694	203,486	50	37.0
Yonkers, N. Y.	79,803	100,176	134,646	142,598	152,798	64	17.2
York, Pa.	44,750	47,512	55,254	56,712	59,953	194	4.2
Youngstown, Ohio	79,066	132,358	170,002	167,720	168,330	57	32.8

\* Land area as of April 1, 1950. NOTE: Increase in population from census to census includes that due to annexation of territory as well as to direct growth.

## Density of U. S. Population by State

Source: U. S. Bureau of the Census.

State	Land area, sq. mi.*	Population per sq. mi.			State	Land area, sq. mi.*	Population per sq. mi.		
		1920	1940	1950			1920	1940	1950
District of Columbia	61	7,292.9	10,870.3	13,150.5	Missouri	69,226	49.5	54.6	57.1
Rhode Island	1,058	566.4	674.2	748.5	Florida	54,262	17.7	35.0	51.1
New Jersey	7,522	420.0	553.1	642.8	Iowa	56,045	43.2	45.3	46.8
Massachusetts	7,867	479.2	545.9	596.2	Mississippi	47,248	38.6	46.1	46.1
Connecticut	4,899	286.4	348.9	409.7	Vermont	9,278	38.6	38.7	40.7
New York	47,944	217.9	281.2	309.3	Minnesota	80,009	29.5	34.9	37.3
Maryland	9,881	145.8	184.2	237.1	Arkansas	52,675	33.4	37.0	36.3
Pennsylvania	45,045	194.5	219.8	233.1	Washington	66,786	20.3	25.9	35.6
Ohio	41,000	141.4	168.0	193.8	Oklahoma	69,031	29.2	33.7	32.4
Delaware	1,978	113.5	134.7	160.8	Maine	31,040	25.7	27.3	29.4
Illinois	55,935	115.7	141.2	155.8	Texas	263,513	17.8	24.3	29.3
Michigan	57,022	63.8	92.2	111.7	Kansas	82,108	21.6	21.9	23.2
Indiana	36,205	81.3	94.7	108.7	Nebraska	76,663	16.9	17.2	17.3
West Virginia	24,080	60.9	79.0	83.3	Oregon	96,315	8.2	11.3	15.8
Virginia	39,893	57.4	67.1	83.2	Colorado	103,922	9.1	10.8	12.8
North Carolina	49,697	52.5	72.7	82.7	North Dakota	70,057	9.2	9.2	8.8
Tennessee	41,797	56.1	69.5	78.8	South Dakota	76,536	8.3	8.4	8.5
Kentucky	39,864	60.1	70.9	73.9	Utah	82,346	5.5	6.7	8.4
South Carolina	30,305	55.2	62.1	69.9	Idaho	82,769	5.2	6.3	7.1
California	156,740	22.0	44.1	67.5	Arizona	113,575	2.9	4.4	6.6
Wisconsin	54,705	47.6	57.3	62.8	New Mexico	121,511	2.9	4.4	5.6
Alabama	51,078	45.8	55.5	59.9	Montana	145,878	3.8	3.8	4.1
Louisiana	45,102	39.6	52.3	59.4	Wyoming	97,506	2.0	2.6	3.0
New Hampshire	9,017	49.1	54.5	59.1	Nevada	109,789	0.7	1.0	1.5
Georgia	58,483	49.3	53.4	58.9	TOTAL U. S.	2,974,726	35.5	44.2	50.7

## U. S. Population by States, 1790 to 1950

Source: U. S. Bureau of the Census.

State	1790	1800	1810	1820	1830	1840
Alabama				127,901	309,527	590,756
Arkansas			1,062	14,273	30,388	97,574
Connecticut	237,946	251,002	261,942	275,248	297,675	309,978
Delaware	59,096	64,273	72,674	72,749	76,748	78,085
D. C.		14,093	24,023	33,039	39,834	43,712
Florida					34,730	54,477
Georgia	82,548	162,686	252,433	340,989	516,823	691,392
Illinois			12,282	55,211	157,445	476,183
Indiana		5,641	24,520	147,178	343,031	685,866
Iowa						43,112
Kentucky	73,677	220,955	406,511	564,317	687,917	779,828
Louisiana			76,556	153,407	215,739	352,411
Maine	96,540	151,719	228,705	298,335	399,455	501,793
Maryland	319,728	341,548	380,546	407,350	447,040	470,019
Massachusetts	378,787	422,845	472,040	523,287	610,408	737,699
Michigan			4,762	8,896	31,639	212,267
Mississippi		8,850	40,352	75,448	136,621	375,651
Missouri			19,783	66,586	140,455	383,702
New Hampshire	141,885	183,858	214,460	244,161	269,328	284,574
New Jersey	184,139	211,149	245,562	277,575	320,823	373,306
New York	340,120	589,051	959,049	1,372,812	1,918,608	2,428,921
North Carolina	393,751	478,103	555,500	638,829	737,987	753,419
Ohio		45,365	230,760	581,434	937,903	1,519,467
Pennsylvania	434,373	602,365	810,091	1,049,458	1,348,233	1,724,033
Rhode Island	68,825	69,122	76,931	83,059	97,199	108,830
South Carolina	249,073	345,591	415,115	502,741	581,185	594,398
Tennessee	35,691	105,602	261,727	422,823	681,904	829,210
Vermont	85,425	154,465	217,895	235,981	280,652	291,948
Virginia	747,610	880,200	974,600	1,065,366	1,211,405	1,239,797
Wisconsin						30,945
State	1850	1860	1870	1880	1890	1900
Alabama	771,623	964,201	996,992	1,262,505	1,513,401	1,828,697
Arizona			9,658	40,440	88,243	122,931
Arkansas	209,897	435,450	484,471	802,525	1,128,211	1,311,564
California	92,597	379,994	560,247	864,694	1,213,398	1,485,053
Colorado		34,277	39,864	194,327	413,249	539,700
Connecticut	370,792	460,147	537,454	622,700	746,258	908,420
Delaware	91,532	112,216	125,015	146,608	168,493	184,735
D. C.	51,687	75,080	131,700	177,624	230,392	278,718
Florida	87,445	140,424	187,748	269,493	391,422	528,542
Georgia	906,185	1,057,286	1,184,109	1,542,180	1,837,353	2,216,331
Idaho			14,999	32,610	88,548	161,772
Illinois	851,470	1,711,951	2,539,891	3,077,871	3,826,352	4,821,550
Indiana	988,416	1,350,428	1,680,637	1,978,301	2,192,404	2,516,462
Iowa	192,214	674,913	1,194,020	1,624,615	1,912,297	2,231,853
Kansas		107,206	364,399	996,096	1,428,108	1,470,495
Kentucky	982,405	1,155,684	1,321,011	1,648,690	1,858,635	2,147,174
Louisiana	517,762	708,002	726,915	939,946	1,118,588	1,381,625
Maine	583,169	628,279	626,915	648,936	661,086	694,466
Maryland	583,034	687,049	780,894	934,943	1,042,390	1,188,044
Massachusetts	994,514	1,231,066	1,457,351	1,783,085	2,238,947	2,805,346
Michigan	397,654	749,113	1,184,059	1,636,937	2,093,890	2,420,982
Minnesota	6,077	172,023	439,706	780,773	1,310,283	1,751,394
Mississippi	606,526	791,305	827,922	1,131,597	1,289,600	1,551,270
Missouri	682,044	1,182,012	1,721,295	2,168,380	2,679,185	3,106,665
Montana			20,595	39,159	142,924	243,329
Nebraska		28,841	122,993	452,402	1,062,656	1,066,300
Nevada		6,857	42,491	62,266	47,355	42,335
New Hampshire	317,976	326,073	318,300	346,991	376,530	411,588
New Jersey	489,555	672,035	906,096	1,131,116	1,444,933	1,883,669
New Mexico	61,547	93,516	91,874	119,565	160,282	195,310
New York	3,097,394	3,880,735	4,382,759	5,082,871	6,003,174	7,268,894
North Carolina	869,039	992,622	1,071,361	1,399,750	1,617,949	1,893,810
North Dakota*			2,405	36,909	190,983	319,146

State	1850	1860	1870	1880	1890	1900
Ohio.....	1,980,329	2,339,511	2,665,260	3,198,062	3,672,329	4,157,545
Oklahoma.....	.....	.....	.....	.....	258,657†	790,391†
Oregon.....	13,294	52,465	90,923	174,768	317,704	413,536
Pennsylvania.....	2,311,786	2,906,215	3,521,951	4,282,891	5,258,113	6,302,115
Rhode Island.....	147,545	174,620	217,353	276,531	345,506	428,556
South Carolina.....	668,507	703,708	705,606	995,577	1,151,149	1,340,316
South Dakota*	.....	4,837	11,776	98,268	348,600	401,570
Tennessee.....	1,002,717	1,109,801	1,258,520	1,542,359	1,767,518	2,020,616
Texas.....	212,592	604,215	818,579	1,591,749	2,235,527	3,048,710
Utah.....	11,380	40,273	86,786	143,963	210,779	276,749
Vermont.....	314,120	315,098	330,551	332,286	332,422	343,641
Virginia.....	1,421,661	1,596,318	1,225,163	1,512,565	1,655,980	1,854,184
Washington.....	.....	11,594	23,955	75,116	357,232	518,103
West Virginia.....	.....	.....	442,014	618,457	762,794	958,800
Wisconsin.....	305,391	775,881	1,054,670	1,315,497	1,693,330	2,069,042
Wyoming.....	.....	.....	9,118	20,789	62,555	92,531

State	1910	Rank	1920	Rank	1930	Rank	1940	Rank	1950	Rank
Alabama.....	2,138,093	18	2,348,174	18	2,646,248	15	2,832,961	17	3,061,743	17
Arizona.....	204,354	45	334,162	43	435,573	43	499,261	43	749,587	37
Arkansas.....	1,574,449	25	1,752,204	25	1,854,482	25	1,949,387	24	1,909,511	30
California.....	2,377,549	12	3,426,861	8	5,677,251	6	6,907,387	5	10,586,223	2
Colorado.....	799,024	32	939,629	33	1,035,791	33	1,123,296	33	1,325,089	34
Connecticut.....	1,114,756	31	1,380,631	29	1,606,903	29	1,709,242	31	2,007,280	28
Delaware.....	202,322	46	223,003	46	238,380	46	266,505	46	318,085	46
D. C.....	331,069	..	437,571	..	486,869	..	663,091	..	802,178	..
Florida.....	752,619	33	968,470	32	1,468,211	31	1,897,414	27	2,771,305	20
Georgia.....	2,609,121	10	2,895,832	12	2,908,506	14	3,123,723	14	3,444,578	13
Idaho.....	325,594	44	431,866	42	445,032	42	524,873	42	588,637	43
Illinois.....	5,638,591	3	6,485,280	3	7,630,654	3	7,897,241	3	8,712,176	4
Indiana.....	2,700,876	9	2,930,390	11	3,238,503	11	3,427,796	12	3,934,224	12
Iowa.....	2,224,771	15	2,404,021	16	2,470,939	19	2,538,268	20	2,621,073	21
Kansas.....	1,690,949	22	1,769,257	24	1,880,999	24	1,801,028	29	1,905,299	31
Kentucky.....	2,289,905	14	2,416,630	15	2,614,589	17	2,845,627	16	2,944,806	19
Louisiana.....	1,656,388	24	1,798,509	22	2,101,593	22	2,363,880	21	2,683,516	21
Maine.....	742,371	34	768,014	35	797,423	35	847,226	35	913,774	35
Maryland.....	1,295,346	27	1,449,661	28	1,631,526	28	1,821,244	28	2,340,001	24
Massachusetts.....	3,366,416	6	3,852,356	6	4,249,614	8	4,316,721	8	4,690,514	9
Michigan.....	2,810,173	8	3,668,412	7	4,842,325	7	5,256,106	7	6,371,766	7
Minnesota.....	2,075,708	19	2,387,125	17	2,563,953	18	2,792,300	18	2,982,483	18
Mississippi.....	1,797,114	21	1,790,618	23	2,009,821	23	2,183,796	23	2,178,914	26
Missouri.....	3,293,335	7	3,404,055	9	3,629,367	10	3,784,664	10	3,954,653	11
Montana.....	376,053	40	548,889	39	537,606	39	559,456	39	591,024	42
Nebraska.....	1,192,214	29	1,296,372	31	1,377,963	32	1,315,834	32	1,325,510	33
Nevada.....	71,875	48	77,407	48	91,058	48	110,247	48	160,083	48
New Hampshire.....	430,572	39	443,083	41	465,293	41	491,524	44	533,242	44
New Jersey.....	2,537,167	11	3,155,900	10	4,041,334	9	4,160,165	9	4,835,329	8
New Mexico.....	327,301	43	360,350	43	423,317	44	531,818	41	681,187	39
New York.....	9,113,614	1	10,385,227	1	12,588,066	1	13,479,142	1	14,830,192	1
North Carolina.....	2,206,287	16	2,559,123	14	3,170,276	12	3,571,623	11	4,061,929	10
North Dakota.....	577,056	37	646,872	36	680,845	38	641,935	38	619,636	41
Ohio.....	4,767,121	4	5,759,394	4	6,646,697	4	6,907,612	4	7,946,627	5
Oklahoma.....	1,657,155	23	2,028,283	21	2,396,040	21	2,336,434	22	2,233,351	25
Oregon.....	672,765	35	783,389	34	953,786	34	1,089,684	34	1,521,341	32
Pennsylvania.....	7,665,111	2	8,720,017	2	9,631,550	2	9,900,180	2	10,498,012	3
Rhode Island.....	542,610	38	604,397	38	687,497	37	713,346	36	791,896	36
South Carolina.....	1,515,400	26	1,683,724	26	1,738,765	26	1,899,804	26	2,117,027	27
South Dakota.....	583,888	36	636,547	87	692,849	36	642,961	37	652,740	40
Tennessee.....	2,184,789	17	2,337,885	19	2,616,556	16	2,915,841	15	3,291,718	16
Texas.....	3,896,542	5	4,663,228	5	5,824,715	5	6,414,824	6	7,711,194	6
Utah.....	373,351	41	449,396	40	507,847	40	550,310	40	688,862	38
Vermont.....	355,956	42	352,428	44	359,611	45	359,231	45	377,747	45
Virginia.....	2,061,612	20	2,309,187	20	2,421,851	20	2,677,773	19	3,318,680	15
Washington.....	1,141,990	30	1,356,621	30	1,563,396	30	1,736,191	30	2,378,963	23
West Virginia.....	1,221,119	28	1,463,701	27	1,729,205	27	1,901,974	25	2,005,552	29
Wisconsin.....	2,333,860	13	2,632,067	13	2,939,006	13	3,137,518	13	3,434,575	14
Wyoming.....	145,965	47	194,402	47	225,565	47	250,742	47	290,529	47

\* 1860 figure under South Dakota is for Dakota Territory; 1870 and 1880 figures under North and South Dakota are for parts of Territory which later constituted respective states. † Includes population of Indian Territory: 1890, 180,182; 1900, 392,060.



## Population by Race, 1950

Source: U. S. Bureau of the Census.

State	Native white	Foreign-born white	Negro	Indian	Japanese	Chinese
Alabama.....	2,065,778	13,813	979,617	928	88	187
Arizona.....	608,917	45,594	25,874	65,761	780	1,951
Arkansas.....	1,472,218	9,289	426,639	533	113	592
California.....	8,929,840	985,333	462,172	19,947	84,956	58,324
Colorado.....	1,237,666	58,987	20,177	1,567	5,412	458
Connecticut.....	1,654,470	297,859	53,472	333	254	450
Delaware.....	260,034	13,844	43,598	....	14	85
D. C.....	478,368	39,497	280,803	330	353	1,825
Florida.....	2,043,320	122,731	603,101	1,011	238	429
Georgia.....	2,363,847	16,730	1,062,762	333	128	511
Idaho.....	561,988	19,407	1,050	3,800	1,980	244
Illinois.....	7,262,781	783,277	645,980	1,443	11,646	4,207
Indiana.....	3,657,882	100,630	174,168	438	318	496
Iowa.....	2,514,964	84,582	19,692	1,084	310	310
Kansas.....	1,790,384	38,577	73,158	2,381	116	315
Kentucky.....	2,726,022	16,068	201,921	234	74	335
Louisiana.....	1,767,799	28,884	882,428	409	127	526
Maine.....	836,504	74,342	1,221	1,522	30	77
Maryland.....	1,870,535	84,440	385,972	314	289	795
Massachusetts.....	3,897,398	713,699	73,577	1,201	384	3,627
Michigan.....	5,314,090	603,735	442,296	7,000	1,517	1,619
Minnesota.....	2,743,466	210,231	14,022	12,533	1,049	720
Mississippi.....	1,180,318	8,314	986,494	2,502	62	1,011
Missouri.....	3,563,543	92,050	297,088	547	527	519
Montana.....	528,919	43,119	1,232	16,606	524	209
Nebraska.....	1,244,055	57,273	19,234	3,954	619	202
Nevada.....	139,378	10,530	4,302	5,025	382	281
New Hampshire.....	474,141	58,134	731	74	25	93
New Jersey.....	3,880,824	630,761	318,565	621	1,784	1,818
New Mexico.....	612,875	17,336	8,408	41,901	251	166
New York.....	11,371,666	2,500,429	918,191	10,640	3,893	20,171
North Carolina.....	2,966,987	16,134	1,047,353	3,742	98	345
North Dakota.....	559,216	49,232	257	10,766	61	82
Ohio.....	6,985,064	443,158	513,072	1,146	1,986	1,542
Oklahoma.....	2,013,620	18,906	145,503	53,769	137	397
Oregon.....	1,413,516	83,612	11,529	5,820	3,660	2,102
Pennsylvania.....	9,077,239	776,609	638,485	1,141	1,029	2,258
Rhode Island.....	663,751	113,264	13,903	385	25	403
South Carolina.....	1,285,902	7,503	822,077	554	34	101
South Dakota.....	597,737	30,767	727	23,344	56	44
Tennessee.....	2,745,192	15,065	530,603	339	104	230
Texas.....	6,449,889	276,645	977,458	2,736	957	2,435
Utah.....	647,065	29,844	2,729	4,201	4,452	335
Vermont.....	348,435	28,753	443	30	14	34
Virginia.....	2,546,485	35,070	734,211	1,056	193	565
Washington.....	2,125,495	191,001	30,691	13,816	9,694	3,408
West Virginia.....	1,855,696	34,586	114,867	160	46	99
Wisconsin.....	3,174,456	218,234	28,182	12,196	529	590
Wyoming.....	270,719	13,290	2,557	3,237	450	106
Totals.....	124,780,454	10,161,168	15,042,692	343,410	141,768	117,629

## Cases of Single and Plural Registered Births

Source: U. S. Public Health Service.

Year	Cases of single births	Cases of plural births				Total cases	Rate*
		Twins	Triplets	Quadruplets	Quintuplets		
1940.....	2,311,378	24,976	247	3	0	2,336,604	10.8
1945.....	2,678,712	28,604	257	0	1	2,707,574	10.7
1950.....	3,479,639	37,759	352	5	0	3,517,755	10.8
1951†.....	3,674,604	38,256	313	7	0	3,713,180	10.4

\* Number of plural births per 1,000 total cases. † All single births and cases of twin births in which only 1 child was born alive are based on a 50% sample; all other cases of plural births are based on a total count. NOTE: "Cases" refers to confinements resulting in either single or plural issue. Only those cases in which one child was born alive are included.

## Population for Urban and Rural Groups, 1930-50

Source: U. S. Bureau of the Census.

Under the urban definition established for the 1950 Census, the urban population comprised all persons living in (a) places of 2,500 inhabitants or more, incorporated as cities, boroughs, towns (except in New England, New York and Wisconsin, where "towns" are minor civil divisions of counties and are not necessarily densely settled centers), and villages; (b) the densely settled urban fringe, including both incorporated and unincorporated areas, around cities of 50,000 or more; and (c) unincorporated places of 2,500 inhabitants or more, outside any urban fringe. The remaining population is classified as rural. According to the urban definition used in previous censuses, the urban population comprised all persons living in incorporated places of 2,500 inhabitants or more and areas (usually minor civil divisions) classified as urban under special rules relating to population size and density.

Type of place by population	1930		1940		1950	
	Number of places	Population	Number of places	Population	Number of places	Population
Urban territory.....	3,165	68,954,823	3,464	74,423,702	3,883	86,550,941
1,000,000 or more.....	5	15,064,555	5	15,910,866	5	17,404,450
500,000-1,000,000.....	8	5,763,987	9	6,456,959	13	9,186,945
250,000-500,000.....	24	7,956,228	23	7,827,514	23	8,241,560
100,000-250,000.....	56	7,540,966	55	7,792,650	65	9,478,662
50,000-100,000.....	98	6,491,448	107	7,343,917	126	8,930,823
25,000-50,000.....	185	6,425,693	213	7,417,093	249	8,710,867
10,000-25,000.....	606	9,097,200	665	9,966,898	752	11,515,155
5,000-10,000.....	851	5,897,156	965	6,681,894	1,093	7,569,509
2,500-5,000.....	1,332	4,717,590	1,422	5,025,911	1,557	5,512,970
Rural territory.....	.....	53,820,223	.....	57,245,573	.....	64,146,420
1,000-2,500 (Incorporated).....	3,087	4,820,707	3,205	5,026,834	3,408	5,382,637
Under 1,000 (Incorporated).....	10,346	4,362,746	10,083	4,315,843	9,826	4,129,049
Unincorporated territory.....	.....	44,636,770	.....	47,902,896	.....	54,534,734
Total United States.....	.....	122,775,046	.....	131,669,275	.....	150,697,361

## U. S. Population 21 Years Old and Over, 1950

Source: U. S. Bureau of the Census.

State	Males	Females	Total	State	Males	Females	Total
Alabama.....	843,927	903,832	1,747,759	Nebraska.....	431,142	429,249	860,391
Arizona.....	223,303	218,586	441,889	Nevada.....	57,810	49,363	107,173
Arkansas.....	550,158	562,708	1,112,866	New Hampshire.....	171,020	181,760	352,780
California.....	3,569,206	3,642,619	7,211,825	New Jersey.....	1,628,358	1,725,802	3,354,160
Colorado.....	420,846	423,902	844,748	New Mexico.....	192,582	182,805	375,387
Connecticut.....	670,521	711,852	1,382,373	New York.....	4,994,060	5,380,386	10,374,446
Delaware.....	103,149	107,769	210,918	North Carolina.....	1,130,024	1,181,047	2,311,071
D. C.....	268,844	314,494	583,338	North Dakota.....	194,439	172,151	366,590
Florida.....	887,957	935,556	1,823,513	Ohio.....	2,586,095	2,693,666	5,279,761
Georgia.....	964,109	1,044,719	2,008,828	Oklahoma.....	682,993	699,115	1,382,108
Idaho.....	181,675	167,341	349,016	Oregon.....	509,726	491,990	1,001,716
Illinois.....	2,925,046	3,033,555	5,958,601	Pennsylvania.....	3,408,977	3,588,242	6,997,219
Indiana.....	1,261,119	1,295,348	2,556,467	Rhode Island.....	259,666	278,458	538,124
Iowa.....	840,331	854,288	1,694,619	South Carolina.....	554,085	596,782	1,150,867
Kansas.....	616,047	626,494	1,242,541	South Dakota.....	209,349	191,797	401,146
Kentucky.....	864,430	878,548	1,742,978	Tennessee.....	961,147	1,017,401	1,978,548
Louisiana.....	770,580	816,565	1,587,145	Texas.....	2,351,820	2,385,405	4,737,225
Maine.....	283,509	293,331	576,840	Utah.....	196,181	193,662	389,843
Maryland.....	752,882	774,207	1,527,089	Vermont.....	116,599	120,953	237,552
Massachusetts.....	1,520,510	1,685,594	3,206,104	Virginia.....	1,011,519	1,013,820	2,025,339
Michigan.....	2,066,908	2,039,698	4,106,606	Washington.....	799,604	759,662	1,559,266
Minnesota.....	958,369	951,784	1,910,153	West Virginia.....	587,373	584,505	1,171,878
Mississippi.....	587,284	620,739	1,208,023	Wisconsin.....	1,112,677	1,109,746	2,222,423
Missouri.....	1,281,239	1,361,890	2,643,129	Wyoming.....	96,131	82,450	178,581
Montana.....	198,368	173,977	372,345	Total U. S.....	47,853,694	49,549,613	97,403,307

### By Census Divisions

New England.....	3,021,825	3,271,948	6,293,773	East South Central.....	3,256,788	3,420,520	6,677,308
Middle Atlantic.....	10,031,395	10,694,430	20,725,825	West South Central.....	4,355,551	4,463,793	8,819,344
East North Central.....	9,951,845	10,172,013	20,123,858	Mountain.....	1,566,896	1,492,086	3,058,982
West North Central.....	4,530,916	4,587,653	9,118,569	Pacific.....	4,878,536	4,894,271	9,772,807
South Atlantic.....	6,259,942	6,552,899	12,812,841				

## Places in the U. S. According to Size, 1950

Source: U.S. Bureau of the Census.

	Rural territory		Urban territory						
	Under 1,000	1,000-2,500	Under 2,500	2,500-5,000	5,000-10,000	10,000-25,000	25,000-50,000	50,000-100,000	Over 100,000
Alabama.....	161	84	3	38	27	13	3	1	3
Arizona.....	8	22	..	15	13	2	1	..	1
Arkansas.....	298	65	1	32	20	7	4	..	1
California.....	20	148	8	92	50	75	17	11	8
Colorado.....	170	46	7	19	11	7	1	1	1
Connecticut.....	3	42	..	12	9	8	6	2	4
Delaware.....	29	10	2	3	5	..	..	..	1
D. C.....	..	..	..	..	..	..	..	..	1
Florida.....	136	84	17	45	23	15	10	2	3
Georgia.....	388	110	7	61	21	15	4	3	2
Idaho.....	136	25	..	21	3	7	2	..	..
Illinois.....	674	209	49	105	81	45	14	10	2
Indiana.....	299	116	15	42	38	20	10	4	5
Iowa.....	710	126	5	42	28	10	8	4	1
Kansas.....	447	78	9	34	10	20	2	1	2
Kentucky.....	169	104	23	36	23	8	4	2	1
Louisiana.....	92	86	..	32	23	10	4	..	3
Maine.....	..	44	..	26	12	9	2	1	..
Maryland.....	76	38	17	15	7	8	2	..	1
Massachusetts.....	..	69	..	27	11	16	13	10	7
Michigan.....	216	157	11	55	38	37	10	7	3
Minnesota.....	559	127	6	38	31	16	3	..	3
Mississippi.....	161	72	..	26	13	8	6	1	..
Missouri.....	591	109	48	52	28	19	5	2	2
Montana.....	67	37	..	12	7	4	3	..	..
Nebraska.....	420	75	1	22	9	8	..	1	1
Nevada.....	2	12	..	6	2	1	1	..	..
New Hampshire.....	..	36	..	9	2	7	2	1	..
New Jersey.....	52	74	42	76	63	42	14	8	6
New Mexico.....	27	32	..	10	12	4	2	1	..
New York.....	215	195	40	96	61	45	15	6	7
North Carolina.....	279	136	1	49	27	20	5	5	1
North Dakota.....	286	47	..	2	6	3	2	..	..
Ohio.....	482	186	40	81	60	45	19	6	8
Oklahoma.....	356	83	4	39	24	17	4	..	2
Oregon.....	129	49	1	24	14	8	2	..	1
Pennsylvania.....	376	306	68	156	131	70	11	9	6
Rhode Island.....	..	13	..	1	2	2	2	3	1
South Carolina.....	132	81	1	45	27	7	1	3	..
South Dakota.....	248	34	..	12	7	4	1	1	..
Tennessee.....	114	73	3	31	24	9	3	..	4
Texas.....	253	228	13	121	80	50	5	9	7
Utah.....	135	46	1	17	12	1	1	1	1
Vermont.....	37	27	..	6	7	2	1	..	..
Virginia.....	112	79	..	34	22	12	5	3	2
Washington.....	126	63	6	33	12	13	5	..	3
West Virginia.....	88	139	3	32	15	7	4	3	..
Wisconsin.....	311	124	5	51	24	17	12	4	1
Wyoming.....	59	12	..	13	1	4	1	..	..
Total.....	9,649	4,158	457	1,846	1,176	778	252	126	106

## Families in the U. S., by Size, 1953

Source: U. S. Bureau of the Census.

Size of family	Husband-wife	Other	Total	Size of family	Husband-wife	Other	Total
2 persons.....	11,180,000	2,580,000	13,760,000	6 persons.....	2,120,000	216,000	2,336,000
3 persons.....	8,698,000	1,234,000	9,932,000	7 or more.....	1,812,000	182,000	1,994,000
4 persons.....	7,648,000	680,000	8,328,000	Total families.....	35,782,000	5,238,000	41,020,000
5 persons.....	4,324,000	346,000	4,670,000	Av. (mean) size..	3.60	3.07	3.53



## U. S. Population by Age, 1950

Source: U. S. Bureau of the Census

Age	White males	White females	Nonwhite males	Nonwhite females	Total males	Total females
Under 5 years.....	7,244,211	6,940,122	991,953	987,295	8,236,164	7,927,417
5 to 9 years.....	5,915,130	5,681,286	799,426	803,844	6,714,556	6,485,130
10 to 14 years.....	4,944,535	4,749,925	715,862	708,944	5,660,397	5,458,869
15 to 19 years.....	4,685,825	4,644,685	625,518	660,561	5,311,343	5,305,246
20 to 24 years.....	5,002,782	5,176,405	603,511	699,130	5,606,293	5,875,535
25 to 29 years.....	5,349,707	5,575,097	622,371	695,085	5,972,078	6,270,182
30 to 34 years.....	5,080,610	5,275,721	544,113	616,563	5,624,723	5,892,284
35 to 39 years.....	4,955,941	5,102,532	561,603	626,310	5,517,544	5,728,842
40 to 44 years.....	4,573,529	4,616,761	496,740	516,943	5,070,269	5,133,704
45 to 49 years.....	4,080,174	4,089,180	446,192	454,919	4,526,366	4,544,099
50 to 54 years.....	3,756,125	3,779,314	372,523	364,226	4,128,648	4,143,540
55 to 59 years.....	3,350,888	3,344,844	279,158	260,230	3,630,046	3,605,074
60 to 64 years.....	2,829,399	2,823,207	208,439	198,430	3,037,838	3,021,637
65 to 69 years.....	2,223,014	2,362,572	201,547	215,803	2,424,561	2,578,375
70 to 74 years.....	1,513,308	1,668,267	115,521	114,853	1,628,829	1,783,120
75 to 84 years.....	1,405,854	1,668,556	100,902	102,439	1,506,756	1,770,995
85 years and over.....	218,160	313,956	18,668	26,117	236,828	304,073
Total all ages.....	67,129,192	67,812,430	7,704,047	8,051,692	74,833,239	75,864,122
21 years and over.....	43,396,342	44,798,849	4,457,352	4,750,764	47,853,694	49,549,613
Median age.....	30.4	31.1	25.9	26.2	29.9	30.5

## Live Births and Deaths in the United States, 1933 to 1953

(Deaths exclude fetal deaths)

Source: U. S. Public Health Service.

Year	BIRTHS				DEATHS <sup>2</sup>			
	Males	Females	Total	Rate <sup>1</sup>	Males	Females	Total	Rate <sup>3</sup>
1933.....	1,068,871	1,012,361	2,081,232	16.6	737,312	604,794	1,342,106	10.7
1934.....	1,112,703	1,054,933	2,167,636	17.2	772,595	624,308	1,396,903	11.1
1935.....	1,105,489	1,049,616	2,155,105	16.9	771,320	621,432	1,392,752	10.9
1936.....	1,099,465	1,045,325	2,144,790	16.7	821,439	657,789	1,479,228	11.6
1937.....	1,130,641	1,072,696	2,203,337	17.1	808,834	641,593	1,450,427	11.3
1938.....	1,172,541	1,114,421	2,286,962	17.6	764,902	616,489	1,381,391	10.6
1939.....	1,162,600	1,102,938	2,265,538	17.3	768,877	619,020	1,387,897	10.6
1940.....	1,211,684	1,148,715	2,360,399	17.9	791,003	626,266	1,417,269	10.8
1941.....	1,289,734	1,223,693	2,513,427	18.8	785,033	612,609	1,397,642	10.5
1942.....	1,444,365	1,364,631	2,808,996	20.8	780,454	604,733	1,385,187	10.3
1943.....	1,506,959	1,427,901	2,934,860	21.5	817,485	642,059	1,459,544	10.9
1944.....	1,435,301	1,359,499	2,794,800	20.2	789,861	621,477	1,411,338	10.6
1945.....	1,404,587	1,330,869	2,735,456	19.5	788,063	613,656	1,401,719	10.6
1946.....	1,691,220	1,597,452	3,288,672	23.3	785,689	609,928	1,395,617	10.0
1947.....	1,899,876	1,800,064	3,699,940	25.8	818,234	627,136	1,445,370	10.1
1948.....	1,813,852	1,721,216	3,535,068	24.2	820,931	623,406	1,444,337	9.9
1949.....	1,826,352	1,733,177	3,559,529	24.0	821,291	622,316	1,443,607	9.7
1950.....	1,823,555	1,730,594	3,554,149	23.6	827,749	624,705	1,452,454	9.6
1951.....	1,923,020 <sup>4</sup>	1,827,830 <sup>4</sup>	3,750,850 <sup>4</sup>	24.5 <sup>4</sup>	845,233	636,866	1,482,099	9.7
1952 <sup>5</sup> .....	.....	.....	3,824,000	24.6	.....	.....	1,494,000	9.6
1953 <sup>6</sup> .....	.....	.....	3,909,000	24.7	.....	.....	1,519,000	9.6

<sup>1</sup> For 1941-46, based on population including armed forces overseas. <sup>2</sup> Excludes deaths among armed forces overseas. <sup>3</sup> Based on population excluding armed forces overseas for 1940-53. <sup>4</sup> Based on a 50% sample. <sup>5</sup> Estimated. NOTE: Rates are per 1,000 population estimated as of July 1 for 1915-39, 1941-49 and 1951-53, and enumerated as of Apr. 1 for 1940 and 1950.

## The Continental Divide

The Continental Divide is a ridge of high ground which runs irregularly north and south through the Rocky Mountains and separates eastward-flowing from westward-

flowing streams. The waters which flow eastward empty into the Atlantic Ocean, chiefly by way of the Gulf of Mexico; those which flow westward empty into the Pacific.

## A Brief Summary of Naturalization Requirements and Procedure

Source: Immigration and Naturalization Service.

The right of a person to become a naturalized citizen of the U. S. shall not be abridged because of race or sex or because that person is married.

Generally, an applicant for naturalization must have been lawfully admitted to the U. S. for permanent residence. Further, he must have resided continuously in the U. S.: for an unmarried applicant, 5 years; for husbands and wives of citizens of the U. S., 3 years—provided that the applicant has been living in marital union with the citizen spouse, who has been a U. S. citizen during all such period. The last 6 months of the required period of residence must be in the state where the application is made. The applicant must have been physically present in the U. S. for periods totaling at least half of the required residence.

An applicant must demonstrate an understanding of the English language, including an ability to read, write and speak words in ordinary usage in English—unless physically unable to do so, or unless, on Dec. 24, 1952, he was over 50 years of age and had been living in the U. S. at least 20 years.

An alien 18 years of age or over may file a petition for naturalization. Before doing so, however, he must make preliminary application on Form N-400. Thereafter, he is notified by the Immigration and Naturalization Service when and where to appear with his witnesses for preliminary interrogation, and to file petition for naturalization. The applicant and his witnesses are questioned by an examiner, and if he meets the requirements, the examiner assists him in filing the petition. Generally, the petition must be filed with the clerk of the court in the jurisdiction in

which the petitioner resides. The fee is \$10. After the filing of the petition, and after further examination, the petitioner is notified by mail when to appear in the naturalization court for final hearing.

If the petition is granted, the petitioner must renounce allegiance to any foreign state of which he is a citizen or subject, and swear allegiance to the U. S. If the Immigration and Naturalization Service recommends that the petition for naturalization be denied, the petitioner may request the court to review his case.

Since Dec. 24, 1952, it has not been necessary to file a declaration of intention (which is commonly referred to as a first paper) before filing a petition for naturalization. However, an alien, over 18 years of age and residing in the U. S. pursuant to a lawful admission for permanent residence, may file a declaration of intention. Thus, an alien who may not be ready for naturalization because, for example, he has not completed the required period of residence, may show his intention of becoming a citizen. Application for declaration of intention must be made on Form N-300; and after the application has been approved by the Immigration and Naturalization Service, the applicant is notified to appear before a clerk of the court to make and file a declaration of intention. The fee is \$5.

The above information applies to naturalization in general. There are also several special classes of naturalization, such as that of children, former citizens of the U. S., etc., for which the requirements and procedure may vary. Additional information is available at all offices of the Immigration and Naturalization Service.

## Naturalization Statistics Since 1907

Period	Declarations filed	Petitions filed			Persons naturalized		
		Civilian	Military	Total	Civilian	Military	Total
1907 to 1910.....	526,322	.....	.....	164,036	111,738	.....	111,738
1911 to 1920.....	2,686,909	1,137,084	244,300	1,381,384	884,672	244,300	1,128,972
1921 to 1930.....	2,709,014	1,827,073	57,204	1,884,277	1,716,979	56,206	1,773,185
1931 to 1940.....	1,369,479	1,612,411	24,702	1,637,113	1,498,573	19,891	1,518,464
1941 to 1950.....	920,284	.....	.....	1,938,066	1,837,229	149,799	1,987,028
1941.....	224,123	.....	.....	277,807	275,747	1,547	277,294
1942.....	221,796	341,979	1,508	343,487	268,762	1,602	270,364
1943.....	115,664	338,885	38,240	377,125	281,459	37,474	318,933
1944.....	42,368	275,486	50,231	325,717	272,766	49,213	441,979
1945.....	31,195	172,905	23,012	195,917	208,707	22,695	231,402
1946.....	28,787	110,071	13,793	123,864	134,849	15,213	150,062
1947.....	37,771	70,767	18,035	88,802	77,442	16,462	93,904
1948.....	60,187	.....	.....	68,265	69,080	1,070	70,150
1949.....	64,866	.....	.....	71,044	64,138	2,456	66,594
1950.....	93,527	.....	.....	66,038	64,279	2,067	66,346
1951.....	91,497	.....	.....	61,634	53,741	975	54,716
1952.....	111,461	.....	.....	94,086	87,070	1,585	88,655
1953.....	23,558	.....	.....	98,128	90,476	1,575	92,051
1907 to 1953.....	8,438,524	.....	.....	7,258,724	6,280,478	474,331	6,754,809

## Immigration by Country of Origin, 1820 to 1953

Source: Immigration and Naturalization Service.

(Figures are totals, not annual averages, and were tabulated as follows: 1820-87, alien passengers arrived; 1868-91 and 1895-97, immigrant aliens arrived; 1892-94 and 1898 to present, immigrant aliens admitted. Data before 1906 relate to country whence alien came; since 1906, to country of last permanent residence.)

Countries	1820-1910	1911-1920	1921-1930	1931-1940	1941-1950	1951-1953	1820-1953
Europe: Albania <sup>1</sup> .....			1,663	2,040	85	9	3,797
Austria <sup>2</sup> .....	3,172,461	453,649	32,868	3,563	24,860	34,981	3,722,382
Belgium.....	103,796	33,746	15,846	4,817	12,189	6,910	177,304
Bulgaria <sup>3</sup> .....	39,440	22,533	2,945	938	375	11	66,242
Czechoslovakia <sup>4</sup> .....		3,426	102,194	14,393	8,347	216	128,576
Denmark.....	258,053	41,983	32,430	2,559	5,393	3,221	343,639
Estonia <sup>1</sup> .....			1,576	506	212	45	2,339
Finland <sup>1</sup> .....		756	16,691	2,146	2,503	1,505	23,601
France.....	470,868	61,897	49,610	12,623	38,809	13,588	647,395
Germany <sup>2</sup> .....	5,351,746	143,945	412,202	114,058	226,578	219,320	6,467,849
Great Britain: England.....	2,212,071	249,944	157,420	21,756	112,252	43,853	2,797,296
Scotland.....	488,749	78,357	159,781	6,887	16,131	9,115	759,020
Wales.....	59,540	13,107	13,012	735	3,209	746	90,349
Not specified <sup>4</sup> .....	793,741					2,374	796,115
Greece.....	186,204	184,201	51,084	9,119	8,973	12,751	452,332
Hungary <sup>2</sup> .....		442,693	30,680	7,861	3,469	221	484,924
Ireland.....	4,212,169	146,181	220,591	13,167	25,377	10,974	4,630,049
Italy.....	3,086,356	1,109,524	455,315	68,028	57,661	28,732	4,805,616
Latvia <sup>1</sup> .....			3,399	1,192	361	74	5,026
Lithuania <sup>1</sup> .....			6,015	2,201	683	42	8,941
Luxemburg <sup>1</sup> .....			727	565	820	218	2,330
Netherlands.....	175,943	43,718	26,948	7,150	14,860	9,095	277,714
Norway <sup>5</sup> .....	665,189	66,395	68,531	4,740	10,100	6,877	821,832
Poland <sup>6</sup> .....	165,182	4,813	227,734	17,026	7,571	469	422,795
Portugal.....	132,989	89,732	29,994	3,329	7,423	3,108	266,575
Rumania <sup>7</sup> .....	72,117	13,311	67,646	3,871	1,076	161	158,182
Spain.....	69,296	68,611	28,958	3,258	2,898	1,737	174,758
Sweden <sup>8</sup> .....	1,021,165	95,074	97,249	3,960	10,665	5,971	1,234,084
Switzerland.....	237,401	23,091	29,676	5,512	10,547	4,783	311,010
Turkey in Europe.....	85,800	54,677	14,659	737	580	274	156,727
U.S.S.R. <sup>8</sup> .....	2,359,048	921,201	61,742	1,356	548	46	3,343,941
Yugoslavia <sup>9</sup> .....		1,888	49,064	5,835	1,576	1,361	59,724
Other Europe.....	2,605	8,111	9,603	2,361	5,573	2,735	29,398
<b>Total Europe.....</b>	<b>25,421,929</b>	<b>4,376,564</b>	<b>2,477,853</b>	<b>348,289</b>	<b>621,704</b>	<b>425,523</b>	<b>33,671,862</b>
Asia: China.....	326,060	21,278	29,907	4,928	16,709	1,126	400,008
India.....	5,409	2,082	1,886	496	1,761	336	11,970
Japan <sup>9</sup> .....	158,344	83,837	33,462	1,948	1,555	6,664	285,810
Turkey in Asia <sup>10</sup> .....	106,481	79,389	19,165	328	218	28	205,609
Other Asia.....	16,942	5,973	12,980	7,644	11,537	13,326	68,402
<b>Total Asia<sup>15</sup>.....</b>	<b>613,236</b>	<b>192,559</b>	<b>97,400</b>	<b>15,344</b>	<b>31,780</b>	<b>21,480</b>	<b>971,799</b>
America: Canada & Newfoundland <sup>11</sup> .....	1,230,501	742,185	924,515	108,527	171,718	95,517	3,272,963
Central America.....	10,365	17,159	15,769	5,861	21,665	7,664	78,483
Mexico <sup>12</sup> .....	77,645	219,004	459,287	22,319	60,589	32,415	871,259
South America.....	29,385	41,899	42,215	7,803	21,831	13,698	156,831
West Indies.....	233,146	123,424	74,899	15,502	49,725	21,202	517,898
Other America <sup>13</sup> .....			31	25	29,276	15,834	45,166
<b>Total America.....</b>	<b>1,581,042</b>	<b>1,143,671</b>	<b>1,516,716</b>	<b>160,037</b>	<b>354,804</b>	<b>186,330</b>	<b>4,942,600</b>
Africa.....	9,581	8,443	6,286	1,750	7,367	2,765	36,192
Australia & New Zealand.....	31,654	12,348	8,299	2,231	13,805	1,777	70,114
Pacific Islands <sup>15</sup> .....	8,859	1,079	427	780	5,437	3,338	19,920
Countries not specified.....	252,691 <sup>14</sup>	1,147	228		142	458	254,666
<b>Total all countries.....</b>	<b>27,918,992</b>	<b>5,735,811</b>	<b>4,107,209</b>	<b>528,431</b>	<b>1,035,039</b>	<b>641,671</b>	<b>39,967,153</b>

<sup>1</sup> Countries established since beginning of World War I are theretofore included with countries to which they belong. <sup>2</sup> Data for Austria-Hungary not reported until 1861. Austria and Hungary recorded separately after 1905. <sup>3</sup> Bulgaria, Serbia, Montenegro first reported in 1899. <sup>4</sup> Bulgaria reported separately since 1920. In 1920, separate enumeration for Kingdom of Serbs, Croats, Slovenes; since 1922, recorded as Yugoslavia. <sup>5</sup> United Kingdom not specified; for 1901-51, included in "Other Europe." <sup>6</sup> Norway included with Sweden 1820-68. <sup>7</sup> Included with Austria-Hungary, Germany and Russia 1890-1910. <sup>8</sup> No record of immigration until 1880. <sup>9</sup> Since 1931, U.S.S.R. has been broken down into European Russia and Siberia or Asiatic Russia. <sup>10</sup> No record of immigration until 1861. <sup>11</sup> Includes all British North American possessions 1820-98. <sup>12</sup> No record of immigration 1886-93. <sup>13</sup> Included with "Countries not specified" prior to 1925. <sup>14</sup> Includes 32,897 persons returning in 1906 to their homes in U. S. <sup>15</sup> From 1952, Asia included Philippines. From 1954-51, Philippines included in Pacific Islands; before 1954, recorded in separate tables as Insular Travel.



## U. S. Foreign-born Population by Country of Birth

Source: U. S. Bureau of the Census.

Country of birth	Total foreign-born 1900	Foreign-born white				
		1910	1920	1930	1940	1950
<b>Northwestern Europe</b>						
England.....	840,513	876,455	812,828	808,684	621,975	584,615 <sup>a</sup>
Scotland.....	233,524	261,034	254,567	354,323	279,321	244,200
Wales.....	93,586	82,479	67,066	60,205	35,360	( <sup>c</sup> )
Northern Ireland.....	1,615,459	1,352,155	1,037,233	178,832	106,416	15,398
Ireland (Eire).....				744,810	572,031	504,961
Norway.....	336,388	403,858	363,862	347,852	262,088	202,294
Sweden.....	582,014	665,183	625,580	595,250	445,070	324,944
Denmark.....	153,690	181,621	189,154	179,474	138,175	107,897
Iceland.....				2,764	2,104	
Netherlands.....	94,931	120,053	131,766	133,133	111,064	102,133
Belgium.....	29,757	49,397	62,686	64,194	53,958	52,891
Luxemburg.....	3,031	3,068	12,585	9,048	6,886	
Switzerland.....	115,593	124,834	118,659	113,010	88,293	71,515
France.....	104,197	117,236	152,890	135,265	102,930	107,924
<b>Central Europe</b>						
Germany.....	2,663,418	2,311,085	1,686,102	1,608,814	1,237,772	984,331
Poland.....	383,407	293,884	1,139,978	1,268,583	993,479	861,184
Czechoslovakia.....			362,436	491,638	319,971	278,268
Austria.....	432,798	284,506	575,625	370,914	479,906	408,785
Hungary.....	145,714	495,600	397,282	274,450	290,228	268,022
Yugoslavia.....			169,437	211,416	161,093	143,956
<b>Eastern Europe</b>						
U. S. S. R.....	423,726	21,184,382	1,400,489	1,153,624	1,040,884	894,844
Latvia.....				20,673	18,636	
Estonia.....				3,550	4,178	
Lithuania.....			135,068	193,606	165,771	147,765
Finland.....	62,641	129,669	149,824	142,478	117,210	95,506
Rumania.....	15,032	65,920	102,823	146,393	115,940	84,952
Bulgaria.....		11,453	10,477	9,399	8,888	
Turkey in Europe.....	9,910	32,221	5,284	2,257	4,412	
<b>Southern Europe</b>						
Greece.....	8,515	101,264	175,972	174,526	163,252	169,083
Italy.....	484,027	1,343,070	1,610,109	1,790,424	1,623,580	1,427,145
Spain.....	7,050	21,977	49,247	59,033	47,707	45,565
Portugal.....	30,608	57,623	67,453	69,993	62,347	54,337
Other Europe.....	2,251	212,851	11,509	25,065	19,819	86,375
<b>Asia</b>						
Palestine.....	(*)	59,702	3,202	6,135	7,047	
Syria.....			51,900	57,227	50,859	
Turkey in Asia.....			11,014	46,651	52,479	
Other Asia.....	120,248	4,612	44,334	47,567	39,524	(*)
<b>America</b>						
Canada-French.....	395,126	385,083	307,786	370,852	273,366	238,409
Canada-other.....	784,796	810,987	810,092	907,660	770,753	756,153
Newfoundland.....	(*)	5,076	13,242	23,971	21,361	
Mexico.....	103,393	219,802	478,383	639,017	377,433	450,562
Cuba.....	11,081	12,869	12,843	16,089	15,277	
Other West Indies.....	14,354	10,300	13,526	15,511	15,257	
Central America.....	3,897	1,507	4,074	7,791	7,638	(*)
South America.....	4,733	7,562	16,855	30,333	28,770	(*)
<b>All other</b>						
Australia.....	6,807	8,938	10,801	12,720	10,998	
Azores.....	9,768	15,795	33,788	35,432	25,751	
Other Atlantic islands.....			5,196	4,053	3,232	
Other and not reported.....	15,293	15,434	17,727	18,716	18,649	146,833
<b>Total.....</b>	<b>10,341,276</b>	<b>13,345,545</b>	<b>13,712,754</b>	<b>13,983,405</b>	<b>11,419,138</b>	<b>10,161,168</b>

<sup>1</sup> Included with Canada. <sup>2</sup> Persons reported in 1910 as of Polish mother tongue born in Austria, Germany, Russia have been deducted from their respective countries and combined as Poland. <sup>3</sup> Turkey in Asia included with Turkey in Europe prior to 1910. <sup>4</sup> Includes 4,635 persons born in Serbia and 5,363 persons born in Montenegro, which became part of Yugoslavia in 1918. <sup>5</sup> Turkey in Asia included Armenia, Palestine and Syria in 1910. Subsequent to 1910 Armenia included with "Other Asia." <sup>6</sup> Includes Wales. <sup>7</sup> Included in figure for England. <sup>8</sup> All Asia, 180,024.

\* Other America, 120,297.

## Immigration to U. S., 1820 to 1953

Source: Immig. and Naturalization Service.

Year	No. of per-sons*	Year	No. of per-sons*	Year	No. of per-sons*	Year	No. of per-sons*
1820	8,385	1854	427,833	1888	546,889	1922	309,556
1821	9,127	1855	200,877	1889	444,427	1923	522,919
1822	6,911	1856	200,436	1890	455,302	1924	706,896
1823	6,354	1857	251,306	1891	560,319	1925	294,314
1824	7,912	1858	123,126	1892	579,663	1926	304,488
1825	10,199	1859	121,282	1893	439,730	1927	335,175
1826	10,837	1860	153,640	1894	285,631	1928	307,255
1927	18,875	1861	91,918	1895	258,536	1929	279,678
1828	27,382	1862	91,985	1896	343,267	1930	241,700
1829	22,520	1863	176,282	1897	230,832	1931	97,139
1830	23,322	1864	193,418	1898	229,299	1932	35,576
1831	22,633	1865	248,120	1899	311,715	1933	23,068
1832	60,482	1866	318,568	1900	448,572	1934	29,470
1833	58,640	1867	315,722	1901	487,918	1935	34,956
1834	65,365	1868	138,840	1902	648,743	1936	36,329
1835	45,374	1869	352,768	1903	857,046	1937	50,244
1836	76,242	1870	387,203	1904	812,870	1938	67,895
1837	79,340	1871	321,500	1905	1,026,499	1939	82,998
1838	38,914	1872	404,806	1906	1,100,735	1940	70,756
1839	68,069	1873	459,803	1907	1,285,349	1941	51,776
1840	84,066	1874	313,339	1908	782,870	1942	28,781
1841	80,289	1875	227,498	1909	751,786	1943	23,725
1842	104,565	1876	169,986	1910	1,041,570	1944	28,551
1843	52,496	1877	141,857	1911	878,587	1945	38,119
1844	78,615	1878	138,469	1912	838,172	1946	108,721
1845	114,371	1879	177,826	1913	1,197,892	1947	147,292
1846	154,416	1880	457,257	1914	1,218,480	1948	170,570
1847	234,968	1881	669,431	1915	326,700	1949	188,317
1848	226,527	1882	788,992	1916	298,826	1950	249,187
1849	297,024	1883	603,322	1917	295,403	1951	205,717
1850	369,980	1884	518,592	1918	110,618	1952	265,520
1851	379,466	1885	395,346	1919	141,132	1953	170,434
1852	371,603	1886	334,203	1920	430,001		
1853	368,645	1887	490,109	1921	805,228		

\* From 1820-67, figures represent alien passengers arrived; 1868-91 and 1895-97, immigrant aliens arrived; 1892-94 and 1898 to present, immigrant aliens admitted.

## Population of Territories and Possessions

Source: U. S. Bureau of the Census.

Area	1930	1940	1950
United States.....	122,775,046	131,669,275	150,697,361
Alaska.....	59,278	72,524	128,643
American Samoa.....	10,055	12,908	18,937
Canal Zone.....	39,467	51,827	52,822
Guam.....	18,509	22,290	59,498
Hawaii.....	368,336	423,330	499,794
Philippines <sup>1</sup> .....	13,513,000	16,356,000	.....
Puerto Rico.....	1,543,913	1,869,255	2,210,703
Virgin Is. of U. S.....	22,012	24,889	26,665
Total <sup>2</sup> .....	138,349,616	150,502,298	153,694,423

<sup>1</sup> The Philippines became independent on July 4, 1946.

<sup>2</sup> Does not include armed forces overseas and the trust territory, acquired in 1947, of the Mariana, Caroline, and Marshall Islands.

## One Accidental Death Every 6 Minutes in 1953

Source: National Safety Council.

The nation's 1953 accident totals can be figured at the following approximate rates:

Class of accident	One every
All accidents	Deaths 6 minutes Injuries 3 seconds
Motor-vehicle	Deaths 14 minutes Injuries 23 seconds
Occupational	Deaths 35 minutes Injuries 16 seconds
Workers off-job	Deaths 16 minutes Injuries 13 seconds
Home	Deaths 18 minutes Injuries 7 seconds
Public non-motor-vehicle	Deaths 33 minutes Injuries 16 seconds

## Death Rates for Selected Causes, 1910-50

(Exclusive of fetal deaths. Rates are per the 100,000 estimated midyear population. Figures for 1950 are not comparable to those for earlier years because of the revision made in 1948 of the classification of causes of death.)

Source: U. S. Public Health Service.

Cause	1910	1920	1930	1940 <sup>1</sup>	1950 <sup>1</sup>
Accidents <sup>2</sup> .....	82.7 <sup>3</sup>	60.7 <sup>4</sup>	53.8	47.3	37.5
Appendicitis.....	10.8	13.2	15.2	9.9	2.0
Cancer <sup>5</sup> .....	76.2	83.4	97.4	120.0	139.8
Cirrhosis of liver.....	13.3	7.1	7.2	8.6	9.2
Diabetes mellitus.....	15.3	16.1	19.1	26.5	16.2
Diphtheria.....	21.1	15.3	4.9	1.1	.3
Heart disease.....	158.9 <sup>6</sup>	159.6 <sup>6</sup>	214.2	292.0	355.5
Homicide.....	4.6	6.8	8.8	6.2	5.3
Influenza.....	14.2	70.5	19.4	15.3	4.4
Malaria.....	1.1	3.4	2.9	1.1	.1

Cause	1910	1920	1930	1940 <sup>1</sup>	1950 <sup>1</sup>
Mot.-veh. accidents.....	1.8 <sup>6</sup>	10.3 <sup>6</sup>	26.7	26.1	23.1
Nephritis.....	94.8	88.8	91.0	81.4	....
Pneumonia.....	141.7	136.8	83.1	54.9	26.9
Premature birth.....	37.7	43.6	31.5	24.5	....
Scarlet fever.....	11.4	4.6	1.9	.5	.2
Suicide.....	15.3	10.2	15.6	14.3	11.4
Syphilis.....	13.5	16.5	15.7	14.4	5.0
Tuberculosis.....	153.8	113.1	71.1	45.8	22.5
Typhoid <sup>7</sup> .....	22.5	7.6	4.8	1.1	.1
Whooping cough.....	11.6	12.5	4.8	2.2	.7

<sup>1</sup> Excludes armed forces overseas. <sup>2</sup> Other than motor-vehicle accidents. <sup>3</sup> Includes legal executions. <sup>4</sup> Includes other malignant tumors. <sup>5</sup> Excludes diseases of coronary arteries. <sup>6</sup> Excludes automobile collisions with trains and street cars, and motorcycle accidents. <sup>7</sup> Includes paratyphoid fever.

NOTE: Rates are for population in death-registration states: 1910—51.4% of U. S. population; 1920—80.9%; 1930—95.3%; 1940—100%.

# Births and Deaths, by States, 1951-52

Source: U. S. Public Health Service.

State	Births <sup>1</sup>				Deaths <sup>1,2</sup>			
	1951 <sup>3</sup>	Rate <sup>4</sup>	1952 <sup>3</sup>	Rate <sup>4</sup>	1951 <sup>3</sup>	Rate <sup>4</sup>	1952 <sup>3</sup>	Rate <sup>4</sup>
Alabama.....	83,300	27.3	83,403	27.3	27,226	8.9	27,304	8.9
Arizona.....	23,208	28.8	25,474	29.7	7,790	9.7	7,854	9.1
Arkansas.....	46,370	24.3	43,388	23.1	15,897	8.3	15,464	8.2
California <sup>5</sup> .....	(260,559)	(23.5)	(258,629)	(22.7)	(103,438)	(9.3)	(103,033)	(9.0)
Colorado.....	36,500	26.4	38,112	26.6	13,020	9.4	13,112	9.2
Connecticut.....	41,733	20.5	45,408	21.6	19,624	9.7	19,889	9.5
Delaware.....	8,141	24.7	8,952	26.5	3,600	10.9	3,655	10.8
D. C.....	29,605	36.5	30,617	36.7	8,988	11.1	9,160	11.0
Florida.....	70,164	23.6	73,886	23.8	29,503	9.9	30,702	9.9
Georgia.....	95,198	27.2	98,180	27.9	31,052	8.9	30,801	8.8
Idaho.....	16,156	27.4	16,406	27.0	4,891	8.3	4,722	7.8
Illinois.....	195,778	22.2	202,294	22.7	91,510	10.4	92,988	10.4
Indiana.....	101,021	25.0	103,907	25.3	40,817	10.1	40,749	9.9
Iowa.....	67,342	25.8	65,121	24.6	26,482	10.1	26,757	10.1
Kansas.....	45,884	23.5	48,005	24.0	19,431	10.0	19,744	9.9
Kentucky.....	77,508	26.4	74,546	25.6	27,114	9.2	28,302	9.7
Louisiana.....	78,690	28.5	78,128	27.7	24,669	8.9	24,095	8.6
Maine.....	21,329	23.9	21,290	24.1	9,967	11.2	9,784	11.1
Maryland.....	55,714	22.7	57,320	22.7	23,169	9.4	24,153	9.6
Massachusetts.....	.....	.....	.....	.....	.....	.....	.....	.....
Michigan.....	171,628	26.3	175,849	26.2	58,957	9.0	59,094	8.8
Minnesota.....	79,565	26.7	78,533	26.0	28,190	9.4	28,205	9.3
Mississippi.....	66,913	30.5	65,431	30.1	20,941	9.6	20,458	9.4
Missouri.....	92,836	23.0	92,189	22.7	44,443	11.0	44,823	11.1
Montana.....	15,625	26.6	16,150	27.3	5,877	10.0	5,989	10.1
Nebraska.....	33,423	24.9	33,692	24.6	12,930	9.6	13,166	9.6
Nevada.....	4,213	24.6	4,473	24.9	1,881	11.0	1,878	10.4
New Hampshire.....	12,149	22.8	12,137	22.6	6,429	12.1	6,279	11.7
New Jersey.....	100,826	20.3	105,863	20.7	49,350	9.9	50,573	9.9
New Mexico.....	22,575	32.0	24,245	33.4	5,788	8.2	5,520	7.6
New York.....	318,340	21.3	326,654	21.5	158,399	10.6	160,781	10.6
North Carolina.....	114,193	27.5	113,993	27.3	31,910	7.7	32,686	7.8
North Dakota.....	17,206	28.5	17,111	28.5	5,036	8.4	4,942	8.2
Ohio.....	200,099	24.9	207,031	25.3	81,820	10.2	83,891	10.3
Oklahoma.....	50,940	22.5	49,645	21.9	19,720	8.7	19,119	8.4
Oregon.....	37,037	23.8	39,589	24.8	14,614	9.4	14,566	9.1
Pennsylvania.....	235,490	22.4	240,116	22.5	111,302	10.6	110,481	10.4
Rhode Island.....	18,077	22.7	18,767	23.0	8,185	10.3	8,239	10.1
South Carolina.....	61,734	28.8	62,347	29.3	17,683	8.2	18,077	8.5
South Dakota.....	18,520	28.7	19,579	29.5	5,798	9.0	5,895	8.9
Tennessee.....	85,127	25.7	82,715	25.4	30,668	9.3	30,206	9.3
Texas.....	217,090	27.1	226,022	27.6	67,295	8.4	64,852	7.9
Utah.....	22,853	32.3	24,239	32.9	5,224	7.4	5,495	7.5
Vermont.....	8,650	23.3	8,938	24.0	4,324	11.6	4,160	11.2
Virginia.....	82,640	24.1	86,403	24.7	29,487	8.6	30,142	8.6
Washington.....	59,211	24.4	63,142	25.6	23,436	9.7	23,355	9.5
West Virginia.....	51,728	26.0	50,037	25.6	17,180	8.6	17,205	8.8
Wisconsin.....	88,066	25.4	89,263	25.2	33,675	9.7	34,034	9.6
Wyoming.....	8,000	27.1	8,311	27.0	2,389	8.1	2,497	8.1
Total (46 states and D. C.).....	3,388,395	24.6	3,456,901	24.8	1,327,681	9.7	1,335,843	9.6

<sup>1</sup> Exclusive of stillbirths. <sup>2</sup> Exclusive of deaths among armed forces overseas. <sup>3</sup> Provisional figures. <sup>4</sup> Per 1,000 estimated midyear population. <sup>5</sup> Because of change in reporting procedure, data for 1952 are not comparable with data for 1951.

## Live Births by Race, U. S., 1940-51

Source: U. S. Public Health Service.

Year	White	Negro	Indian	Chinese	Japanese	Other	Total
1940.....	2,067,953	278,869	9,547	1,098	1,873	1,059	2,360,399
1945.....	2,395,563	324,264	10,172	1,382	2,936	1,139	2,735,456
1949.....	3,083,721	453,235	12,332	5,062	3,237	1,942	3,559,529
1950.....	3,063,627	466,718	13,362	5,029	3,203	2,010	3,554,149
1951 <sup>1</sup> .....	3,237,072	489,282	13,878	4,870	3,682	2,066	3,750,850

<sup>1</sup> Based on 50% sample.



## Registered Live Births by Age of Mother, 1940-51

Source: U. S. Public Health Service.

Year	Age of mother								Total*
	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49†	
1951 <sup>4</sup>	5,086	443,872	1,198,966	1,072,374	637,238	304,898	78,222	4,934	3,750,850
1950	5,021	419,535	1,131,234	1,021,902	597,821	293,440	74,804	4,830	3,554,149
1949	5,016	433,028	1,154,824	1,007,237	581,350	291,234	74,300	5,201	3,559,529
1948	4,884	431,933	1,159,877	980,904	580,481	289,421	74,764	5,215	3,535,068
1947	4,454	425,845	1,216,464	1,040,383	616,337	305,101	77,470	5,536	3,699,940
1946	3,462	322,381	1,051,289	936,466	589,122	296,411	75,039	5,609	3,288,672
1945	3,573	280,997	796,849	755,365	532,239	280,641	73,720	5,782	2,735,456
1944	3,565	301,130	866,946	769,015	511,869	263,442	70,073	4,965	2,794,800
1943	3,737	343,550	930,015	822,249	510,413	248,870	66,406	5,020	2,934,860
1942	3,566	341,315	927,661	782,699	462,380	220,999	60,867	5,108	2,808,996
1940	3,257	300,747	738,436	645,867	400,225	201,120	60,915	5,555	2,360,399

### Rates\*

1951 <sup>4</sup>	0.9	84.5	208.2	171.4	106.3	52.6	14.8	1.1	109.2
1950	0.9	79.1	192.5	163.0	101.5	51.2	14.6	1.1	103.9
1949	0.9	80.8	197.0	162.2	99.8	51.6	14.7	1.2	104.8
1948	0.9	79.7	198.6	160.3	101.3	52.3	15.1	1.2	105.2
1947	0.8	77.7	209.1	172.5	109.4	56.4	15.9	1.3	111.3
1946	0.6	58.1	181.1	157.2	106.2	55.8	15.7	1.3	99.8
1945	0.6	49.9	137.7	128.4	97.3	53.8	15.7	1.4	83.7
1944	0.6	52.6	149.3	131.8	94.6	51.3	15.1	1.2	85.9
1943	0.7	59.0	159.5	141.9	95.3	49.2	14.5	1.2	90.5
1942	0.6	57.6	158.5	136.2	87.3	44.4	13.5	1.2	86.9
1940	0.6	48.9	125.3	114.4	77.4	41.9	13.9	1.4	73.7

\* Includes births to women 50 years of age and over; in 1951, there were 174 such births. † Includes births for which age of mother was not stated. ‡ Based on births per 1,000 female population in each age group, enumerated as of Apr. 1 for 1940 and 1950, and estimated as of July 1 for 1941-49 and 1951. Rates for "Total" computed by relating total births, regardless of age of mother, to female population aged 15-44 years. ‡ Based on a 50% sample.

## Life Expectancy in the United States, 1950

(This table, based on deaths and estimated midyear population for 1950, indicates the average future lifetime in years of all individuals at the ages shown.)

Source: U. S. Public Health Service.

Age	White Males	White Females	Non-white Males	Non-white Females	Total population	Age	White Males	White Females	Non-white Males	Non-white Females	Total population
0	66.6	72.4	59.2	63.2	68.4	45	27.1	31.5	23.8	26.6	28.8
1	67.6	73.1	61.3	64.8	69.5	50	23.0	27.1	20.5	23.2	24.7
5	64.0	69.5	58.0	61.4	65.8	55	19.3	22.9	17.6	20.2	20.9
10	59.2	64.6	53.2	56.7	61.0	60	15.9	19.0	15.2	17.7	17.3
15	54.4	59.7	48.5	51.9	56.2	65	13.0	15.3	13.3	15.6	14.1
20	49.7	54.9	44.0	47.3	51.5	70	10.3	12.0	11.1	13.0	11.2
25	45.2	50.1	39.7	42.9	46.9	75	8.0	9.2	9.3	11.0	8.7
30	40.5	45.4	35.5	38.5	42.2	80	6.1	6.9	8.0	9.5	6.7
35	35.9	40.6	31.5	34.4	37.6	85	4.5	5.1	6.0	7.4	4.9
40	31.4	36.0	27.5	30.4	33.1						

## Other Years, White Males and Females

Years	At birth		Age 20		Age 45		Age 70	
	Males	Females	Males	Females	Males	Females	Males	Females
1900-1902*	48.2	51.1	42.2	43.8	24.2	25.5	9.0	9.6
1919-1921†	56.3	58.5	45.6	46.5	26.0	27.0	9.5	9.9
1929-1931	59.1	62.7	46.0	48.5	25.3	27.4	9.2	10.0
1930-1939	60.6	64.5	46.8	49.7	25.5	28.0	9.3	10.2
1939-1941	62.8	67.3	47.8	51.4	25.9	28.9	9.4	10.5
1948	65.5	71.0	49.0	53.8	26.5	30.5	9.8	11.2
1949	66.2	71.9	49.6	54.6	27.0	31.3	10.3	11.9

\* For original death-registration area (26.2% of national population).

† For death-registration area of 1920 (80.9% of national population).

## Life Expectancy, by Country

Source: Statistical Office of the United Nations.

Country	Years	Sex	Average future lifetime in years at age of									
			0	1	10	20	30	40	50	60	70	
Australia <sup>1</sup> .....	1946-48	M	66.07	67.25	59.04	49.64	40.40	31.23	22.67	15.36	9.55	
		F	70.63	71.45	63.11	53.47	44.08	34.91	26.14	18.11	11.14	
Austria.....	1949-51	M	61.91	65.90	58.02	48.68	39.71	30.74	22.31	15.12	9.27	
		F	66.97	70.09	62.15	52.62	43.37	34.20	25.42	17.27	10.37	
Belgium.....	1946-49	M	62.0	65.3	57.4	48.0	39.3	30.6	22.5	15.5	9.5	
		F	67.3	69.7	61.7	52.3	43.2	34.2	25.5	17.5	10.7	
Brazil <sup>2</sup> .....	1920	Both	37.43	45.26	44.28	36.33	30.34	24.36	18.61	13.33	8.76	
Bulgaria <sup>3</sup> .....	1925-28	M	45.92	54.37	53.75	45.78	38.45	30.70	23.23	16.45	10.88	
		F	46.64	53.73	53.20	45.45	38.97	31.73	24.32	17.18	11.05	
Canada <sup>4</sup> .....	1947	M	65.18	67.75	59.79	50.48	41.41	32.37	23.92	16.46	10.44	
		F	69.05	70.93	62.78	53.33	44.12	35.00	26.32	18.25	11.41	
China: Formosa (Taiwan).....	1936-40	M	41.08	47.61	45.62	37.15	29.68	22.66	16.50	11.28	7.09	
		F	45.73	51.46	50.78	42.37	34.83	27.70	20.65	14.18	8.74	
Czechoslovakia.....	1929-32	M	51.92	59.90	54.04	45.29	37.15	28.96	21.24	14.35	8.67	
		F	55.18	61.96	56.10	47.40	39.24	30.98	22.83	15.35	9.24	
Denmark.....	1946-50	M	67.8	70.0	61.7	52.2	43.0	33.8	25.1	17.1	10.4	
		F	70.1	71.7	63.3	53.6	44.2	35.0	26.1	17.9	10.9	
Egypt.....	1936-38	M	35.65	42.09	46.86	39.77	32.96	26.12	19.42	13.29	7.88	
		F	41.48	48.14	54.47	46.11	38.23	30.82	23.43	16.26	9.55	
England and Wales <sup>5</sup> .....	1951	M	65.8	67.1	58.7	49.1	39.7	30.5	21.7	14.3	8.6	
		F	70.9	71.7	63.2	53.5	44.0	34.7	25.7	17.5	10.5	
Finland.....	1941-45	M	54.62	57.68	51.27	42.90	35.36	27.52	20.16	13.78	8.80	
		F	61.14	63.84	57.42	48.91	40.96	32.68	24.41	16.58	10.03	
France.....	1946-49	M	61.9	65.4	57.6	48.3	39.4	30.7	22.5	15.3	9.3	
		F	67.4	70.3	62.4	52.9	43.9	35.0	26.2	18.1	11.1	
Germany (Federal Republic).....	1949-51	M	64.56	67.79	59.76	50.34	41.32	32.32	23.75	16.20	9.84	
		F	68.48	71.01	62.84	53.23	43.89	34.66	25.75	17.46	10.42	
Greece.....	1926-30	M	49.09	53.22	52.40	44.31	37.07	29.76	22.58	16.03	10.57	
		F	50.89	55.09	54.48	46.43	39.45	32.40	24.93	17.49	10.99	
Hungary.....	1941	M	54.92	61.75	55.27	46.65	38.58	30.14	22.15	15.00	8.97	
		F	58.22	64.00	57.32	48.73	40.57	32.12	23.76	16.03	9.52	
India <sup>6</sup> .....	1921-31	M	26.91	34.68	36.38	29.57	23.60	18.60	14.31	10.25	6.35	
		F	26.56	33.48	33.61	27.08	22.30	18.23	14.65	10.81	6.74	
Italy.....	1930-32	M	53.76	59.71	55.46	46.75	38.58	30.39	22.45	15.16	9.05	
		F	56.00	61.32	57.15	48.49	40.41	32.14	23.89	16.13	9.61	
Japan.....	1949-50	M	56.19	59.12	53.20	44.17	36.72	28.83	20.98	14.06	8.80	
		F	59.61	62.23	56.36	47.52	39.95	31.97	23.92	16.43	10.28	
Mexico.....	1940	M	37.92	44.43	45.43	37.56	31.00	24.82	18.96	13.35	8.68	
		F	39.79	46.22	47.86	40.01	33.31	26.60	19.99	13.54	8.48	
Netherlands <sup>7</sup> .....	1947-49	M	69.4	70.8	62.7	53.2	43.8	34.5	25.6	17.5	10.7	
		F	71.5	72.4	64.1	54.5	45.0	35.6	26.5	18.2	11.1	
New Zealand <sup>8</sup> .....	1934-38	M	65.46	66.92	59.11	49.89	40.94	32.03	23.64	16.06	9.82	
		F	68.45	69.46	61.45	52.02	42.98	34.05	25.47	17.49	10.73	
Norway.....	1945-48	M	67.8	69.3	61.5	52.3	43.7	35.0	26.4	18.5	11.5	
		F	71.7	72.8	64.7	55.2	46.1	37.0	28.1	19.7	12.4	
Poland.....	1948	M	55.6	62.5	55.7	46.8	38.6	30.2	22.2	15.3	9.8	
		F	62.5	67.4	60.7	51.6	42.9	34.2	25.6	17.7	11.0	
Portugal.....	1939-42	M	48.58	56.21	52.61	44.00	36.04	28.23	20.76	13.86	8.19	
		F	52.82	59.23	56.86	48.35	40.35	32.17	23.98	16.20	9.59	
South Africa, Union of <sup>9</sup> .....	1945-47	M	63.78	65.51	57.71	48.35	39.29	30.38	22.21	15.34	9.79	
		F	68.31	69.63	61.73	52.27	43.06	34.07	25.66	18.04	11.39	
Spain.....	1940	M	47.12	52.37	48.55	39.97	32.82	25.36	18.43	12.43	7.59	
		F	53.24	58.83	55.49	46.96	38.85	30.66	22.68	15.20	9.07	
Sweden.....	1941-45	M	67.06	68.43	60.45	51.23	42.57	33.64	25.02	17.19	10.52	
		F	69.71	70.58	62.40	53.02	44.01	34.97	26.20	18.04	11.00	
Switzerland.....	1939-44	M	62.68	64.75	57.08	47.92	39.26	30.42	22.08	14.75	8.85	
		F	66.96	68.46	60.62	51.28	42.32	33.35	24.63	16.65	9.97	
U.S.S.R. (European).....	1926-27	M	41.93	51.40	51.65	43.24	35.65	28.02	20.99	14.85	9.65	
		F	46.79	55.46	55.72	47.36	39.75	32.12	24.41	17.07	10.96	
United States (White only).....	1950	M	66.6	67.6	59.2	49.7	40.5	31.4	23.0	15.9	10.3	
		F	72.4	73.1	64.6	54.9	45.4	36.0	27.1	19.0	12.0	

<sup>1</sup> Excluding full-blooded aborigines. <sup>2</sup> Federal District and 13 cities. <sup>3</sup> Excluding southern Dobruja. <sup>4</sup> Excluding Yukon, Northwest Territories and Newfoundland. <sup>5</sup> Civilian population. <sup>6</sup> Including Burma. <sup>7</sup> Excluding Elten and Tüddern. <sup>8</sup> Excluding Maoris. <sup>9</sup> Europeans only.

## Death Rates by Age and Sex: 1900-1951

(Exclusive of fetal deaths. Rates per 1,000 population in each specified group, estimated as of July 1 for 1900-1930, 1944-49, and 1951, and enumerated as of April 1 for 1940 and 1950.)

Age in years	1900	1920	1930	1940 <sup>1</sup>	1944 <sup>1</sup>	1945 <sup>1</sup>	1947 <sup>1</sup>	1948 <sup>1</sup>	1949 <sup>1</sup>	1950 <sup>1</sup>	1951 <sup>1</sup>
<b>Males all ages<sup>2</sup></b>	17.9	13.4	12.3	12.0	12.4	12.6	11.5	11.3	11.1	11.1	11.1
Under 1	179.1	103.6	77.0	61.9	49.1	47.6	38.8	40.2	39.6	37.3	36.8
1-4	20.5	10.3	6.0	3.1	2.5	2.2	1.8	1.7	1.6	1.5	1.5
5-14	3.8	2.8	1.9	1.2	1.0	1.0	0.8	0.8	0.8	0.7	0.7
15-24	5.9	4.8	3.5	2.3	3.0	2.9	2.0	1.9	1.7	1.7	1.7
25-34	8.2	6.4	4.9	3.4	3.3	3.6	2.5	2.4	2.2	2.2	2.2
35-44	10.7	8.2	7.5	5.9	5.4	5.5	4.8	4.6	4.4	4.3	4.3
45-54	15.7	12.6	13.6	12.5	11.8	11.8	11.5	11.3	10.9	10.7	10.6
55-64	28.7	24.6	26.6	26.2	25.2	25.2	25.2	24.8	24.3	24.1	24.0
65-74	59.3	54.5	55.8	54.2	50.1	49.3	49.5	48.9	48.3	49.0	48.7
75-84	128.3	122.1	119.1	121.3	106.7	104.4	105.1	104.1	103.5	104.3	104.0
85 and over	268.8	253.0	236.7	246.4	218.2	215.7	222.4	220.0	212.0	216.4	205.0
<b>Females all ages<sup>2</sup></b>	16.5	12.6	10.4	9.5	9.0	8.8	8.7	8.5	8.3	8.2	8.2
Under 1	145.4	80.7	60.7	47.7	39.0	37.2	30.0	31.0	30.6	28.5	28.1
1-4	19.1	9.5	5.2	2.7	2.2	1.9	1.5	1.5	1.4	1.3	1.3
5-14	3.9	2.5	1.5	0.9	0.7	0.7	0.5	0.5	0.5	0.5	0.5
15-24	5.8	5.0	3.2	1.8	1.5	1.4	1.2	1.1	1.0	0.9	0.9
25-34	8.2	7.1	4.4	2.7	2.2	2.1	1.8	1.6	1.5	1.4	1.4
35-44	9.8	8.0	6.1	4.5	3.9	3.8	3.3	3.2	3.0	2.9	2.8
45-54	14.2	11.7	10.6	8.6	7.8	7.7	7.2	6.9	6.6	6.4	6.3
55-64	25.8	22.4	21.2	18.1	16.5	16.1	15.4	14.9	14.4	14.1	13.9
65-74	53.6	50.5	46.8	41.9	37.5	36.2	35.1	34.0	33.3	33.0	32.2
75-84	118.8	115.9	106.6	103.7	90.5	87.4	86.8	85.1	83.2	84.0	83.9
85 and over	255.2	244.7	221.4	227.6	196.5	191.1	197.9	195.4	190.6	191.9	183.9
<b>Male and female, all ages<sup>2</sup></b>	17.2	13.0	11.3	10.8	10.6	10.6	10.1	9.9	9.7	9.6	9.7
Under 1	162.4	92.3	69.0	54.9	44.2	42.5	34.5	35.7	35.2	33.0	32.5
1-4	19.8	9.9	5.6	2.9	2.3	2.0	1.6	1.6	1.5	1.4	1.4
5-14	3.9	2.6	1.7	1.0	0.9	0.8	0.7	0.7	0.7	0.6	0.6
15-24	5.9	4.9	3.3	2.0	2.1	2.0	1.6	1.5	1.3	1.3	1.3
25-34	8.2	6.8	4.7	3.1	2.7	2.7	2.1	2.0	1.8	1.8	1.8
35-44	10.2	8.1	6.8	5.2	4.6	4.6	4.1	3.9	3.7	3.6	3.5
45-54	15.0	12.2	12.2	10.6	9.8	9.8	9.4	9.1	8.8	8.5	8.4
55-64	27.2	23.6	24.0	22.3	20.9	20.7	20.3	19.9	19.4	19.1	18.9
65-74	56.4	52.5	51.4	48.0	43.7	42.6	42.1	41.2	40.6	40.7	40.1
75-84	123.3	118.9	112.7	112.0	98.1	95.3	95.2	93.9	92.5	93.3	93.1
85 and over	260.9	248.3	228.0	235.7	205.6	201.4	208.0	205.5	199.4	202.0	192.6

<sup>1</sup> Deaths exclude those among armed forces overseas; also population basis excludes armed forces overseas. <sup>2</sup> Figures for age not stated included in the "total," but not distributed among the specified age groups. NOTE: Percent of U. S. population in death-registration states: 1900—26.2; 1920—30.9; 1930—35.3; 1940, 1944-51—100.0.

## Experienced Civilian Labor Force, 1950 (In Thousands)

Source: U. S. Department of Commerce

Total, 14 years & over	58,999	Musicians & music teachers	161
Professional, technical & kindred workers	4,988	Nurses, professional	404
Accountants & auditors	383	Optometrists	15
Actors & actresses	18	Osteopaths	5
Airplane pilots & navigators	14	Pharmacists	89
Architects	25	Photographers	55
Artists & art teachers	81	Physicians & surgeons	192
Authors, editors & reporters	108	Radio operators	16
Chemists	76	Religious workers	42
Chiropractors	13	Social & welfare workers, except group	76
Clergymen	168	Surveyors	28
College presidents, professors, instructors	126	Veterinarians	13
Dancers & dancing teachers	17	Farmers & farm managers	4,321
Dentists	75	Managers, officials & proprietors, excl. farm	5,076
Draftsmen	125	Clerical & kindred workers	7,070
Engineers, technical	534	Bookkeepers	736
Lawyers & judges	181	Cashiers	234
Librarians	56	Stenographers, typists & secretaries	1,622



## Experienced Civilian Labor Force (Continued)

Sales workers.....	4,044	Service workers, except private household.....	4,512
Insurance agents & brokers.....	307	Barbers, beauticians & manicurists.....	389
Sales & sales clerks.....	3,407	Bartenders.....	208
Craftsmen, foremen & kindred workers.....	8,153	Boarding & lodging house keepers.....	29
Carpenters.....	985	Charwomen & cleaners.....	124
Electricians.....	324	Cooks, except private household.....	463
Foremen, not elsewhere classified.....	854	Elevator operators.....	94
Machinists.....	534	Practical nurses.....	144
Mechanics & repairmen.....	1,768	Waiters & waitresses.....	713
Painters, construction & maintenance.....	431	Farm laborers & foremen.....	2,515
Operators & kindred workers.....	11,715	Laborers, except farm & mine.....	3,751
Private household workers.....	1,488	Occupation not reported.....	1,366

## Crude Birth and Death Rates: Selected Countries

(Number of births and deaths per 1,000 inhabitants, excluding stillbirths)

Source: Statistical Office of the United Nations.

Country	1939		1947		1951		1952		1953	
	Births	Deaths	Births	Deaths	Births	Deaths	Births	Deaths	Births	Deaths
Australia <sup>1</sup> .....	17.6	9.9	24.1	9.7	22.9	9.7	23.3	9.4	22.9	9.0
Austria.....	20.7	15.3	18.6	13.0	14.8	12.7	14.8	11.9	14.5	11.9
Belgium.....	15.0	13.9	17.2	13.3	16.4	12.6	16.8	12.0	....	....
Bulgaria.....	21.4 <sup>2</sup>	13.4 <sup>2</sup>	24.0	13.4	....	....	....	....	....	....
Canada <sup>3</sup> .....	20.6	9.7	28.9	9.4	27.2	9.0	27.4	8.6	27.9	8.6
Ceylon.....	36.0	21.8	39.4	14.3	37.3	11.6	39.5	12.0	39.4	10.9
Chile.....	32.9	23.3	33.8	16.7	32.4	15.7	33.6	13.8	36.1	13.2
Costa Rica.....	44.2	19.3	44.5	14.9	47.6	11.7	54.8	11.6	53.9	11.7
Czechoslovakia.....	18.6 <sup>4</sup>	13.3 <sup>4</sup>	24.2 <sup>4</sup>	12.1 <sup>4</sup>	....	....	....	....	....	....
Denmark.....	17.8	10.1	22.1	9.7	17.8	8.8	17.8	9.0	17.7	9.1
El Salvador.....	44.5	19.6	47.2	17.2	48.8	15.1	48.7	16.3	47.8	14.6
Finland.....	21.2	14.3	28.0	11.9	23.0	10.0	23.1	9.5	21.8	9.6
France <sup>5</sup> .....	14.8	15.6	21.3	13.1	19.5	13.3	19.2	12.3	18.6	12.8
Germany, Western.....	....	....	16.5	11.6	15.8	10.5	15.7	10.5	15.5	11.0
Hungary <sup>6</sup> .....	19.4	13.5	20.6	12.9	....	....	....	....	....	....
India <sup>7</sup> .....	32.7	21.6	26.4	19.5	24.9	14.4	26.8	13.8	26.7	15.0
Ireland.....	19.1	14.2	23.2	14.8	21.1	14.3	21.8	11.9	21.1	11.8
Israel <sup>8</sup> .....	23.1	7.6	30.1	6.6	32.7	6.4	31.6	6.8	30.2	6.3
Italy.....	23.6	13.4	22.3	11.5	18.5	10.3	17.6	10.0	17.4	9.9
Japan <sup>9</sup> .....	26.6	17.8	34.3	14.6	25.6	10.0	23.4	8.9	21.5	8.9
Luxemburg.....	15.0	12.7	14.8	12.5	15.0	11.7	16.1	12.0	16.0	12.5
Mexico.....	44.6	23.0	46.1	16.6	44.2	17.2	43.9	14.9	44.9	15.4
Netherlands.....	20.6	8.6	27.8	8.1	22.3	7.5	22.4	7.3	21.8	7.7
New Zealand.....	20.2	9.8	27.7	9.7	25.6	9.7	26.0	9.5	25.4	9.0
Nicaragua.....	32.5	11.9	34.9	11.1	....	....	....	....	39.0	10.2
Norway.....	15.8	10.1	21.4	9.5	18.4	8.4	18.8	8.5	18.8	8.3
Panamá <sup>10</sup> .....	27.9	11.4	37.2	11.7	32.4	8.6	36.7	8.6	37.0	9.0
Peru <sup>11</sup> .....	27.5	13.8	27.7	11.3	33.4	13.5	25.9	10.1	....	....
Portugal.....	26.2	15.3	24.5	13.5	24.5	12.4	24.7	11.8	23.4	11.3
Puerto Rico.....	39.6	17.7	42.2	11.8	37.5	10.0	35.9	9.1	35.1	8.1
Rumania.....	28.3	18.6	....	....	....	....	....	....	....	....
South Africa, U. of <sup>12</sup> .....	25.3	9.4	27.2	8.6	25.5	8.8	25.9	8.6	25.7	8.9
Spain.....	16.6	18.5	21.5	12.1	20.1	11.6	20.8	9.7	20.6	9.7
Sweden.....	15.4	11.5	18.9	10.8	15.6	9.9	15.5	9.6	15.4	9.7
Switzerland.....	15.2	11.8	19.4	11.4	17.2	10.5	17.4	9.9	17.0	10.2
United Kingdom.....	15.2	12.2	20.7	12.1	15.8	12.6	15.7	11.4	15.9	11.4
United States.....	17.3	10.6	25.8	10.1	24.5	9.7	24.6	9.6	24.7	9.6
Venezuela <sup>11</sup> .....	35.9	18.7	38.2	13.4	43.8	11.1	43.7	10.8	46.1	9.9

<sup>1</sup> Excluding full-blooded aborigines. <sup>2</sup> Excluding Southern Dobruja. <sup>3</sup> Excluding Yukon and the Northwest Territories. <sup>4</sup> Excluding territory ceded by Hungary in 1947. <sup>5</sup> Excluding live-born infants dying before registration of birth. <sup>6</sup> Including territory ceded to Czechoslovakia in 1947. <sup>7</sup> 1939: registration area of former British provinces; 1947-53: registration area of Republic of India. <sup>8</sup> Jewish population; deaths exclude war casualties for 1947. <sup>9</sup> Japanese nationals in 4 principal islands. <sup>10</sup> Excluding tribal Indians. <sup>11</sup> Excluding Indian jungle population. <sup>12</sup> European population only.

## Transportation-Accident Death Rates, 1951-53

Source: National Safety Council.

Kind of transportation	Passenger mileage, in millions	Passenger deaths			All deaths <sup>3</sup>		
		Deaths, 1953	Rates <sup>1</sup>		Deaths, 1953	Rates <sup>1</sup>	
			1953	1951-53 <sup>2</sup>		1953	1951-53 <sup>2</sup>
Passenger automobiles, taxis <sup>4</sup> .....	820,000	23,500	2.9	2.9	32,700	4.0	4.0
Busses.....	55,000	70	0.13	0.16	500	0.9	1.0
Railroad passenger trains.....	31,690	50	0.16	0.21	1,248	3.9	3.8
Scheduled transport planes.....	15,340	86	0.56	0.70	102	0.7	0.9

<sup>1</sup> Per 100,000,000 miles. <sup>2</sup> Average death rate. <sup>3</sup> All persons—pedestrians, trespassers, etc., as well as passengers—killed in operation of vehicles are included. <sup>4</sup> Drivers of passenger automobiles are considered passengers.

## Motor Vehicle Deaths in Largest U. S. Cities, 1952-53

Source: National Safety Council.

City	Number 1952 <sup>1</sup>	Number 1953 <sup>1</sup>	Pop. rate 1953 <sup>2</sup>	Regis. rate 1953 <sup>2</sup>	City	Number 1952 <sup>1</sup>	Number 1953 <sup>1</sup>	Pop. rate 1953 <sup>2</sup>	Regis. rate 1953 <sup>2</sup>
Baltimore.....	118	108	11.4	3.6	Memphis, Tenn.....	27	39	9.8	3.1
Boston, Mass.....	68	69	8.6	4.3	Milwaukee, Wis.....	47	61	9.6	2.8
Buffalo, N. Y.....	41	63	10.9	3.5	Minneapolis, Minn.....	37	45	8.6	2.2
Chicago, Ill.....	458	432	11.9	4.8	New Orleans, La.....	53	61	10.7	4.6
Cincinnati, Ohio.....	58	58	11.5	3.6	New York, N. Y.....	582	620	7.9	4.7
Cleveland, Ohio.....	114	116	12.7	4.2	Newark, N. J.....	44	45	10.3	3.5
Columbus, Ohio.....	36	43	11.4	2.8	Oakland, Calif.....	40	55	14.3	3.8
Dallas, Texas.....	46	60	10.9	3.0	Philadelphia, Pa.....	157	178	8.6	3.9
Denver, Colo.....	47	29	7.0	1.7	Pittsburgh, Pa.....	52	51	7.5	2.9
Detroit, Mich.....	197	213	11.5	3.3	St. Louis, Mo.....	116	104	12.1	3.4
Houston, Texas.....	76	75	12.6	2.8	San Antonio, Texas....	51	53	12.0	3.3
Indianapolis, Ind.....	61	60	14.0	3.0	San Francisco, Calif....	66	67	8.6	2.5
Kansas City, Mo.....	31	64	14.0	3.9	Seattle, Wash.....	52	39	8.0	1.7
Los Angeles, Calif.....	296	277	13.4	2.9	Washington, D. C.....	59	66	8.2	3.3

<sup>1</sup> Only motor-vehicle traffic deaths resulting from accidents occurring within the city are included. <sup>2</sup> Deaths per 100,000 population. <sup>3</sup> Deaths per 10,000 registered motor vehicles. Registration figures supplied by R. L. Polk & Co.

## Principal Types of Accidental Deaths, 1913 to 1953

Source: National Safety Council

Year	Motor vehicle	Falls	All burns*	Drown-ing	Rail-road	Fire-arms	Poison gases	Poisons (except gas)	All types
1913.....	4,200	18,700	9,350	10,000	12,500	2,400	3,550	3,200	82,500
1918.....	10,700	16,700	10,700	7,350	10,500	2,700	4,400	2,650	85,100
1923.....	18,400	16,800	9,550	7,000	8,100	2,950	2,800	2,950	84,400
1928.....	28,000	19,600	9,000	8,750	7,150	3,000	2,800	2,850	95,000
1933.....	31,363	21,746	7,341	7,465	5,410	3,026	1,668	2,334	90,932
1938.....	32,582	25,454	7,145	7,347	4,868	2,696	1,459	2,196	93,805
1943.....	32,823	28,000	10,450	7,710	5,231	2,318	2,110	1,890	99,038
1948 (5th Revision)†.....	32,259	24,800	7,668	6,500	3,976	2,270	2,002	1,713	98,001
1948 (6th Revision)†.....	32,259	22,000	6,800	6,500	3,800	2,330	2,020	1,600	93,000
1950.....	34,763	20,783	6,405	6,131	3,667	2,174	1,769	1,584	91,249
1951.....	36,996	21,376	6,788	6,489	3,631	2,247	1,627	1,497	95,871
1952.....	38,000	20,600	6,900	6,700	3,200	2,450	1,400	1,450	96,000
1953.....	38,300	20,500	6,600	6,700	3,200	2,500	1,300	1,450	95,000

\* Includes burns by fire and deaths directly resulting from conflagration, regardless of nature of injury; also burns by chemicals, steam, or any other hot substance in 1948 (5th Revision) and earlier years. † The most recent revision of classification of deaths by cause differs so greatly from earlier classifications that two figures must be shown for 1948. That of the 5th Revision is comparable with figures for earlier years; that of the 6th Revision, with figures for later years.

# Motor-Vehicle Traffic Deaths by States, 1952-53

Source: National Safety Council.

State	1952	Rate <sup>1</sup>	1953	Rate <sup>1</sup>	State	1952	Rate <sup>1</sup>	1953	Rate <sup>1</sup>
Alabama.....	782	9.5	830	9.5	Nebraska.....	320	5.7	343	5.9
Arizona.....	396	10.6	394	9.8	Nevada.....	143	11.8	143	10.3
Arkansas.....	466	8.8	454	8.3	New Hampshire.....	79	4.4	93	4.9
California.....	3,562	7.4	3,371	6.6	New Jersey.....	838	4.7	784	4.1
Colorado.....	384	6.9	337	5.8	New Mexico.....	373	11.0	416	11.5
Connecticut.....	229	3.2	275	3.6	New York.....	2,073	5.9	2,236	6.0
Delaware.....	83	6.0	111	7.5	North Carolina.....	1,115	8.5	1,118	8.2
D. C.....	59	2.2	66	2.5	North Dakota.....	149	7.6	158	7.6
Florida.....	896	7.6	953	7.5	Ohio.....	2,013	6.8	2,047	6.5
Georgia.....	1,008	8.9	937	7.9	Oklahoma.....	595	7.1	549	6.3
Idaho.....	217	8.6	198	7.5	Oregon.....	460	6.8	390	6.0
Illinois.....	2,135	7.5	2,179	7.2	Pennsylvania.....	1,681	5.5	1,643	5.1
Indiana.....	1,277	8.1	1,277	7.4	Rhode Island.....	69	3.0	70	2.8
Iowa.....	531	5.2	601	5.7	South Carolina.....	810	12.0	763	11.0
Kansas.....	568	7.2	579	7.0	South Dakota.....	163	7.1	187	6.5
Kentucky.....	795	10.1	864	10.4	Tennessee.....	813	8.5	847	8.3
Louisiana.....	682 <sup>2</sup>	9.1	718 <sup>2</sup>	9.1	Texas.....	2,498	7.2	2,368	6.6
Maine.....	137	4.4	172	5.3	Utah.....	246	9.2	209	7.3
Maryland.....	536	7.0	524	6.5	Vermont.....	67	5.1	80	5.8
Massachusetts.....	487	3.7	536	4.0	Virginia.....	960	8.4	904	7.5
Michigan.....	1,736	7.4	1,896	7.4	Washington.....	561	6.2	482	5.1
Minnesota.....	539	5.2	637	5.9	West Virginia.....	405	8.0	446	8.7
Mississippi.....	506	8.4	469	7.5	Wisconsin.....	895	7.5	881	7.1
Missouri.....	1,027	6.6	1,019	6.4	Wyoming.....	165	9.1	173	9.1
Montana.....	241	9.3	250	8.4	TOTAL U. S.....	38,000 <sup>2</sup>	7.2	38,300 <sup>2</sup>	7.1

<sup>1</sup> Number of deaths per 100,000,000 vehicle-miles. <sup>2</sup> From state health authorities. <sup>3</sup> Totals are not sums of state figures. NOTE: Figures are per state traffic authorities and indicate place of accident rather than of death.

## Motor-Vehicle Deaths by Type of Accident, 1913 to 1953

Source: National Safety Council.

Year	Deaths from collisions with—						Deaths from non-collision accidents*	Total deaths†
	Pedestrians	Other motor vehicles	Rail-road trains	Street cars	Bi-cycles	Animal-drawn vehicle or animal	Fixed objects*	
1913.....	.....	.....	.....	.....	.....	.....	.....	4,200
1918.....	.....	.....	.....	.....	.....	.....	.....	10,700
1928.....	.....	.....	.....	.....	.....	.....	.....	18,400
1923.....	.....	.....	.....	.....	950	.....	.....	28,000
1928.....	11,420	4,310	2,140	570	.....	.....	540	8,680
1933.....	12,840	6,470	1,437	318	400	310	900	7,350
1938.....	12,850	8,900	1,490	165	720	170	940	5,690
1943.....	9,900	5,300	1,448	171	450	160	700	8,950
1948.....	9,950	10,200	1,474	83	500	100	1,000	10,950
1950.....	9,100	11,250	1,541	89	450	110	1,300	11,600
1951.....	9,200	12,600	1,573	46	450	100	1,400	12,900
1952.....	8,700	13,000	1,348	50	400	100	1,500	13,300
1953.....	8,600	12,900	1,419	40	450	100	1,500	.....

\* The proportion of deaths allocated to fixed-object collisions and noncollision accidents is different from that reported by most states. State reports generally indicate that many accidents involving no collision on the roadway are classified as fixed-object collisions because the motor vehicle collides with an object after leaving the roadway.

† The totals do not quite equal the sum of the various types because the estimates were generally made only to the nearest 10 deaths, and to the nearest 50 deaths for certain types.



## Marriage Information, by State

*Sources:* Questionnaires to states; and U. S. Public Health Service.

State	Legal minimum marriage age				Blood test required	Waiting period		Marriages <sup>1</sup>	
	With parental consent		Without parental consent			Before license	After license	Marriages, 1952 <sup>2</sup>	Marriage licenses, 1953 <sup>2</sup>
	M	F	M	F					
Alabama.....	17	14	21	18	yes	none	none	20,391	19,925
Arizona.....	18	16	21	18	no	none	none	22,436	21,958
Arkansas.....	18	16	21	18	yes	3 da.	none	53,059 <sup>1</sup>	28,024
California.....	18 <sup>4</sup>	16 <sup>4</sup>	21	18	yes	none	none	78,833	80,014
Colorado.....	16	16	21	18	yes	none	none	12,594 <sup>1</sup>	12,215
Connecticut.....	16	16	21	21	yes	5 da.	none	17,677	18,080
Delaware.....	18	16	21	18	yes	none	24 hr. <sup>5</sup>	2,454	2,636
D. C.....	18	16	21	18	no	3 da.	none	9,487 <sup>1</sup>	8,863
Florida.....	18	16	21	21	yes	3 da.	none	26,924	27,648
Georgia.....	17	14	21	21	yes	5 da.	none	48,430 <sup>15</sup>	52,146
Idaho.....	15	15 <sup>6</sup>	18	18	yes	none	none	8,120	8,487
Illinois.....	18	16	21	18	yes	none	none	81,785 <sup>1</sup>	82,923
Indiana.....	18	16	21	18	yes	none	none	65,087	64,642
Iowa.....	16	14	21	18	yes	none	none	22,600	23,050
Kansas.....	18	16	21	18	yes	3 da.	none	15,971	17,640
Kentucky.....	16	14	21	21	yes	3 da.	none	25,311 <sup>1</sup>	24,202
Louisiana.....	18	16	21	21	(?)	none	72 hr.	21,169	24,394
Maine.....	16	16	21	18	yes	5 da.	none	8,079	8,864
Maryland.....	18	16	21	18	no	48 hr.	none	45,049	46,148
Massachusetts.....	18	16	21	18	yes	5 da.	none	37,699	49,810
Michigan.....	18	16 <sup>13</sup>	18	18	yes	5 da.	none	50,487	52,016
Minnesota.....	16	15	18	16	no	5 da.	none	23,525	24,909
Mississippi.....	14	12	21 <sup>8</sup>	18 <sup>8</sup>	no	none	none	58,116	62,019
Missouri.....	15 <sup>6</sup>	15 <sup>6</sup>	21	18	yes	3 da.	none	28,373	36,082
Montana.....	18	16	21	18	yes	none	none	6,410	6,603
Nebraska.....	18	16	21	21	yes	none	none	11,484	11,655
Nevada.....	18	16	21	18	no	none	none	50,209 <sup>1</sup>	51,845
New Hampshire.....	14	13	21	18	yes	5 da.	none	7,184	7,029
New Jersey.....	18	16	21	18	yes	72 hr.	none	41,125	42,131
New Mexico.....	18	16	21	18	no	none	none	22,438	22,488
New York.....	16	14 <sup>10</sup>	21	18	yes	none	(11)	123,722	128,889
North Carolina.....	16	16	18	18	yes	none <sup>8</sup>	none	26,564 <sup>1</sup>	27,017
North Dakota.....	18	15	21	18	yes	none	none	4,078	4,396
Ohio.....	18	16	21	21	yes	5 da.	none	60,922	64,375
Oklahoma.....	18	15	21	18	yes	none	none	21,418 <sup>15</sup>	23,474
Oregon.....	18	15	21	18	yes	3 da.	none	9,998	10,585
Pennsylvania.....	16 <sup>12</sup>	16 <sup>12</sup>	21	21	yes	3 da.	none	78,946	78,713
Rhode Island.....	18	16	21	21	yes	5 da.	none	6,592	6,336
South Carolina.....	18	14	18	18	no	24 hr.	none	46,122	45,040
South Dakota.....	18	15	21	18	yes	none	none	5,965	6,072
Tennessee.....	16	16	21	21	yes	3 da. <sup>9</sup>	none	21,854	22,594
Texas.....	16	14	21	18	yes	none	none	90,270 <sup>15</sup>	89,679
Utah.....	16	14	21	18	yes	none	none	6,752	6,904
Vermont.....	18	16	21	18	yes	none	5 da.	3,237	3,332
Virginia.....	18	16	21	21	yes	none	none	37,049	37,429
Washington.....	15	15	21	18	no	3 da.	none	30,433	29,527
West Virginia.....	18	16	21	21	yes	3 da.	none	14,927	15,260
Wisconsin.....	18	15	21	18	yes	5 da.	none	24,780	25,575
Wyoming.....	18	16	21	21	yes	none	none	3,183	3,150

<sup>1</sup> Marriage licenses. <sup>2</sup> By place of occurrence. <sup>3</sup> State recognizes common-law marriages. <sup>4</sup> Males under 18 and females under 16 may be married with consent of parents, provided Superior Court gives its permission. <sup>5</sup> 96 hr. if nonresidents. <sup>6</sup> If under 15, order must be obtained from Probate Court. <sup>7</sup> For males only. <sup>8</sup> Except in Pamlico County, 48 hr. <sup>9</sup> Except by court order or known by judge to be over 21. <sup>10</sup> Females 14-16 years old must have consent of Judge of Children's Court. <sup>11</sup> Marriage may not be solemnized within 3 days from date on which specimen was taken for serological test. <sup>12</sup> Orphans' Court may approve issuance of license to one younger than 16 years. <sup>13</sup> Consent of 1 parent or guardian necessary for female only. <sup>14</sup> County judge may give written permission to marry to male under 18 in order to prevent child fathered by applicant from being born out of wedlock. <sup>15</sup> Estimated.

## Marital Status of the Population, 1950

(14 years old and over)

Source: U. S. Bureau of the Census.

State and Census division	Male				Female			
	14 yrs. old & over	Single	Married	Widowed or divorced	14 yrs. old and over	Single	Married	Widowed or divorced
Alabama.....	1,024,915	266,786	708,188	49,941	1,093,798	213,412	724,165	156,221
Arizona.....	263,546	68,104	177,562	17,880	259,511	47,636	176,600	35,275
Arkansas.....	659,656	158,910	460,166	40,580	675,397	113,687	464,118	97,592
California.....	4,034,180	982,971	2,753,112	298,097	4,073,341	646,681	2,729,233	697,427
Colorado.....	489,263	126,051	330,744	32,468	490,550	89,480	328,752	72,318
Connecticut.....	756,080	206,651	505,683	43,746	797,537	185,747	508,301	103,489
Delaware.....	117,542	29,920	80,540	7,082	122,763	25,122	80,971	16,670
D. C.....	301,111	89,087	192,729	19,295	347,872	90,420	197,282	60,170
Florida.....	1,018,121	231,006	718,055	69,060	1,065,169	163,691	722,872	178,606
Georgia.....	1,168,086	307,088	804,327	56,671	1,247,615	235,013	823,792	188,810
Idaho.....	213,170	53,850	145,650	13,670	198,781	31,992	144,491	22,298
Illinois.....	3,309,125	846,005	2,241,186	221,934	3,418,775	674,982	2,241,529	502,264
Indiana.....	1,448,831	334,960	1,014,612	99,259	1,486,515	260,592	1,012,389	213,534
Iowa.....	968,920	247,531	660,592	60,797	985,169	192,515	659,523	133,131
Kansas.....	712,198	174,053	493,294	44,851	720,732	127,650	490,911	102,171
Kentucky.....	1,039,654	282,429	695,990	61,235	1,048,459	209,319	695,284	143,856
Louisiana.....	914,015	236,374	630,055	47,586	968,553	185,330	643,519	139,704
Maine.....	331,780	89,695	217,317	24,768	342,686	74,262	217,857	50,567
Maryland.....	863,852	227,271	587,425	49,156	884,036	177,646	586,999	119,391
Massachusetts.....	1,733,192	512,784	1,109,859	110,549	1,905,814	514,744	1,117,604	273,466
Michigan.....	2,368,024	595,093	1,620,012	152,919	2,349,955	440,298	1,610,981	298,676
Minnesota.....	1,101,812	325,692	713,846	62,274	1,099,122	249,809	712,817	136,502
Mississippi.....	723,522	191,408	495,925	36,189	757,568	141,728	509,602	106,238
Missouri.....	1,466,440	348,128	1,015,421	102,891	1,556,891	290,227	1,021,911	244,753
Montana.....	227,271	65,864	144,198	17,209	202,470	34,687	141,691	26,092
Nebraska.....	498,732	134,383	334,216	30,133	497,059	98,769	333,277	65,013
Nevada.....	64,807	16,316	42,415	6,076	55,791	7,216	40,531	8,044
New Hampshire.....	197,099	53,019	129,426	14,654	207,945	46,848	130,117	30,980
New Jersey.....	1,838,965	484,286	1,251,995	102,684	1,931,114	412,255	1,258,965	259,894
New Mexico.....	233,244	66,052	154,157	13,035	223,050	44,974	152,913	25,163
New York.....	5,616,963	1,549,627	3,751,890	315,446	6,033,574	1,396,777	3,794,988	841,809
North Carolina.....	1,390,072	409,107	926,216	54,749	1,435,312	323,484	938,634	173,194
North Dakota.....	230,502	79,986	139,467	11,049	207,649	47,972	138,449	21,228
Ohio.....	2,935,808	690,429	2,138,936	206,443	3,060,968	583,658	2,034,945	442,265
Oklahoma.....	808,460	193,018	561,938	53,504	822,794	132,665	562,431	127,698
Oregon.....	576,808	131,916	401,369	43,523	561,087	84,938	397,351	78,798
Pennsylvania.....	3,904,893	1,079,197	2,584,123	241,573	4,108,599	956,851	2,604,025	547,723
Rhode Island.....	300,768	90,590	192,099	18,079	319,531	79,889	191,832	42,810
South Carolina.....	688,217	203,243	458,853	26,121	733,249	165,525	470,145	97,579
South Dakota.....	245,727	76,817	155,583	13,327	227,366	47,432	154,299	25,635
Tennessee.....	1,149,299	292,486	793,477	63,336	1,209,638	233,525	799,722	176,391
Texas.....	2,781,613	689,154	1,928,917	163,542	2,801,565	470,351	1,921,991	409,223
Utah.....	235,325	60,719	163,130	11,476	234,486	44,850	162,497	27,139
Vermont.....	136,311	39,015	87,803	9,493	141,356	32,358	87,968	21,030
Virginia.....	1,210,799	360,621	789,730	60,448	1,193,627	252,810	781,345	159,472
Washington.....	919,661	238,492	612,237	68,932	862,214	133,118	603,809	125,287
West Virginia.....	700,823	191,284	470,057	39,482	704,919	147,899	469,136	87,884
Wisconsin.....	1,278,770	357,671	841,970	79,129	1,279,013	278,454	840,508	160,051
Wyoming.....	113,645	32,940	73,125	7,580	96,526	14,978	70,764	10,784
New England.....	3,455,230	991,754	2,242,187	221,289	3,709,869	933,848	2,253,679	522,342
Middle Atlantic.....	11,360,821	3,113,110	7,588,008	659,703	12,073,287	2,765,883	7,657,978	1,649,426
East North Central.....	11,340,558	2,824,158	7,756,716	759,684	11,595,126	2,237,984	7,740,352	1,616,790
West North Central.....	5,224,331	1,386,590	3,512,419	325,322	5,293,994	1,054,374	3,511,187	728,433
South Atlantic.....	7,458,623	2,048,627	5,027,932	382,064	7,734,562	1,581,610	5,071,176	1,081,776
East South Central.....	3,937,390	1,033,109	2,693,580	210,701	4,109,463	797,984	2,728,773	582,706
West South Central.....	5,163,744	1,277,456	3,581,076	305,212	5,268,309	902,033	3,592,059	774,217
Mountain.....	1,840,271	489,896	1,230,981	119,394	1,761,165	315,813	1,218,239	227,113
Pacific.....	5,530,649	1,353,739	3,766,718	410,552	5,496,642	864,737	3,730,393	901,512
TOTAL U. S.....	55,311,617	14,518,079	37,399,617	3,393,921	57,042,417	11,454,266	37,503,836	8,084,315

# Grounds for Divorce

Source: Questionnaires to the states.

State	Adultery	Cruelty	Desertion	Alcoholism	Impotence	Felony conviction	Neglect to provide	Insanity	Pregnancy at marriage	Bigamy	Separation	Indigities	Drug addiction	Violence	Fraudulent contract	Others
Alabama.....	yes	yes	yes <sup>2</sup>	yes	...	yes <sup>50</sup>	yes <sup>3</sup>	yes <sup>4</sup>	yes	...	...	...	yes	yes	...	(5)
Arizona.....	yes	yes	yes	yes	yes	yes <sup>6</sup>	yes	...	yes	yes	yes <sup>4</sup>	yes	yes	yes	yes	(5, 7-13)
Arkansas.....	yes	yes	yes <sup>2</sup>	yes	yes	yes	yes	yes <sup>14</sup>	...	yes	yes <sup>14</sup>	yes	yes	yes	yes	(12, 15, 16)
California.....	yes	yes	yes	yes	yes	yes	yes	yes <sup>14</sup>	...	...	...	...	...	...	...	...
Colorado.....	yes	yes	yes <sup>2</sup>	yes	yes	yes	yes	yes <sup>4</sup>	...	yes	yes <sup>2</sup>	...	yes	yes	...	(7)
Connecticut.....	yes	yes	yes <sup>14</sup>	yes	...	yes <sup>18</sup>	...	yes <sup>4</sup>	...	...	...	...	...	...	yes	(10, 17, 19)
Delaware.....	yes	yes	yes <sup>3</sup>	yes <sup>3</sup>	...	yes <sup>20</sup>	yes	yes <sup>4</sup>	...	yes	...	...	...	...	...	(21-23)
D. C.....	yes	...	yes <sup>3</sup>	...	...	yes	...	...	...	...	yes <sup>4</sup>	...	...	...	...	(12, 17, 24, 47)
Florida.....	yes	yes	yes <sup>2</sup>	...	yes	...	...	...	yes	...	...	...	...	...	...	(13, 16)
Georgia.....	yes	yes	yes <sup>2</sup>	yes	yes	yes <sup>20</sup>	...	...	yes	...	...	...	...	...	yes	(17, 51)
Idaho.....	yes	yes	yes	...	...	...	yes	yes <sup>14</sup>	...	yes	...	...	...	...	...	(17, 51)
Illinois.....	yes	yes	yes <sup>3</sup>	yes <sup>3</sup>	yes	yes	...	...	...	yes	...	...	...	...	...	(10, 23, 27)
Indiana.....	yes	yes	yes <sup>3</sup>	yes	yes	...	yes <sup>3</sup>	yes <sup>4</sup>	...	...	...	...	...	...	...	(10)
Iowa.....	yes	yes	yes <sup>3</sup>	yes	...	yes	...	...	...	...	...	...	...	...	...	(12, 16)
Kansas.....	yes	yes	yes <sup>3</sup>	yes	yes	yes	...	yes <sup>4</sup>	yes	yes	...	...	...	yes	yes	(11, 23, 29)
Kentucky.....	yes	yes	yes	yes	yes	yes	...	yes <sup>4</sup>	yes	...	yes <sup>4</sup>	...	...	yes	yes	(26, 30)
Louisiana.....	yes	yes	yes	yes	...	yes	...	...	...	...	yes <sup>3</sup>	...	...	...	...	(15)
Maine.....	yes	yes	yes	yes	yes	yes <sup>18</sup>	yes	...	yes	...	...	yes	yes	...	...	(34)
Maryland.....	yes	...	yes <sup>11</sup>	...	yes	yes <sup>21</sup>	...	yes <sup>14</sup>	...	...	yes <sup>14</sup>	...	...	...	...	(34)
Massachusetts.....	yes	yes	yes <sup>15</sup>	yes	...	yes <sup>24</sup>	yes	...	...	...	...	...	yes	...	...	(34)
Michigan.....	yes	yes	yes <sup>1</sup>	yes	yes	yes <sup>25</sup>	yes	yes	...	...	...	...	...	...	...	...
Minnesota.....	yes	yes	yes <sup>3</sup>	yes <sup>3</sup>	yes	yes	...	yes <sup>4</sup>	...	...	yes <sup>2</sup>	...	...	...	...	...
Mississippi.....	yes	yes	yes	yes	yes	yes	...	yes <sup>15</sup>	yes	yes	yes <sup>2</sup>	...	yes	yes	...	(7, 12, 15)
Missouri.....	yes	yes	yes	yes	yes	yes	...	...	yes	yes	...	yes	...	...	...	(7-10)
Montana.....	yes	yes	yes	...	...	yes	yes	yes	...	...	...	...	...	...	...	(17)
Nebraska.....	yes	yes	yes	yes	yes	yes <sup>28</sup>	yes	yes <sup>4</sup>	...	...	...	...	...	...	...	...
Nevada.....	yes	yes	yes <sup>1</sup>	yes	yes	yes	yes	yes <sup>3</sup>	...	...	...	...	...	...	...	(10, 31)
New Hampshire.....	yes	yes	yes <sup>14</sup>	yes <sup>14</sup>	yes	yes <sup>3</sup>	yes <sup>14</sup>	...	...	...	...	...	...	yes	...	(18, 28)
New Jersey.....	yes	yes	yes <sup>1</sup>	...	...	...	...	...	...	...	...	...	...	...	...	...
New Mexico.....	yes	yes	yes	yes	yes	yes	yes	yes	yes	...	...	...	...	...	...	(40)
New York.....	yes	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
North Carolina.....	yes	...	...	...	yes	...	...	yes <sup>27</sup>	yes	...	yes <sup>4</sup>	...	...	...	...	(4)
North Dakota.....	yes	yes	yes <sup>1</sup>	yes <sup>1</sup>	...	yes	yes <sup>2</sup>	yes <sup>4</sup>	...	...	...	yes <sup>2</sup>	...	...	...	...
Ohio.....	yes	yes	...	yes <sup>14</sup>	yes	yes	...	...	...	yes	...	...	...	...	yes	(16, 24, 39)
Oklahoma.....	yes	yes	yes <sup>1</sup>	yes	yes	yes	yes	yes <sup>4</sup>	yes	...	...	...	...	...	yes	(24, 33, 49)
Oregon.....	yes	yes	yes <sup>2</sup>	yes <sup>28</sup>	yes	yes	...	yes <sup>14</sup>	...	...	...	yes	...	...	...	...
Pennsylvania.....	yes	yes	yes <sup>1</sup>	...	yes <sup>15</sup>	yes <sup>20</sup>	...	...	...	yes	...	yes	...	...	yes	(11)
Rhode Island.....	yes	yes	yes <sup>4</sup>	yes	yes	...	yes	...	...	...	...	...	yes	...	...	(40)
South Carolina.....	yes	yes	yes <sup>2</sup>	yes	...	...	...	...	...	...	...	...	...	...	...	...
South Dakota.....	yes	yes <sup>2</sup>	yes <sup>3</sup>	...	...	yes	yes <sup>2</sup>	yes <sup>2</sup>	...	...	...	...	...	...	...	(7)
Tennessee.....	yes	yes	yes <sup>3</sup>	yes	yes	yes	yes	...	yes	yes	...	...	...	...	...	(10, 26, 41, 46)
Texas.....	yes	yes	yes <sup>14</sup>	...	...	yes <sup>5</sup>	...	yes <sup>4</sup>	...	...	yes <sup>27</sup>	...	...	...	...	...
Utah.....	yes	yes	yes	yes	yes	yes	yes	yes	...	...	yes <sup>14</sup>	...	...	...	...	...
Vermont.....	yes	yes	yes <sup>14</sup>	...	...	yes <sup>15</sup>	yes	yes <sup>4</sup>	...	...	yes <sup>14</sup>	...	...	...	...	(10)
Virginia.....	yes	...	yes <sup>2</sup>	...	yes	yes	...	...	yes	...	...	...	...	...	...	(5, 13, 42, 43)
Washington.....	yes	yes	yes <sup>2</sup>	yes	yes	yes	yes	yes <sup>3</sup>	...	...	yes <sup>4</sup>	yes	...	...	yes	...
West Virginia.....	yes	yes	yes <sup>3</sup>	yes	...	yes	...	...	...	...	...	...	yes	...	...	...
Wisconsin.....	yes	yes	yes <sup>3</sup>	yes	yes	yes <sup>26</sup>	...	...	...	...	yes <sup>4</sup>	...	...	...	...	(44)
Wyoming.....	yes	yes	yes <sup>2</sup>	yes	yes	yes	yes <sup>2</sup>	yes <sup>3</sup>	yes	...	yes <sup>3</sup>	yes	...	...	...	(8, 9, 45)

<sup>1</sup> If unknown to husband. <sup>2</sup> 1 year. <sup>3</sup> 2 years. <sup>4</sup> 5 years. <sup>5</sup> Crime against nature. <sup>6</sup> With imprisonment of 1 year. <sup>7</sup> Absence of 1 year. <sup>8</sup> Felony before marriage. <sup>9</sup> Husband a vagrant. <sup>10</sup> Infamous crime. <sup>11</sup> Loathsome disease. <sup>12</sup> Relationship within prohibited degree. <sup>13</sup> Wife a prostitute. <sup>14</sup> 3 years. <sup>15</sup> Absence of 3 years. <sup>16</sup> Insanity at time of marriage. <sup>17</sup> Habitual intemperance. <sup>18</sup> With imprisonment for life. <sup>19</sup> Absence of 7 years. <sup>20</sup> With imprisonment of 2 years. <sup>21</sup> Wife under 16 at time of marriage. <sup>22</sup> Husband under 18 at time of marriage. <sup>23</sup> Feeble-mindedness or epilepsy for 5 years. <sup>24</sup> Defendant obtained divorce from plaintiff in any other state or country. <sup>25</sup> Absence. <sup>26</sup> Attempt by one party on life of other. <sup>27</sup> Infected other party with communicable venereal disease. <sup>28</sup> Joining a religious cult disbelieving in marriage. <sup>29</sup> Unchaste behavior of wife after marriage. <sup>30</sup> Public defamation. <sup>31</sup> 18 months. <sup>32</sup> With imprisonment of 3 years, 18 months of which have been served. <sup>33</sup> Any cause which, by laws of state, renders marriage null and void at its inception. <sup>34</sup> With imprisonment of 5 years. <sup>35</sup> With imprisonment of 3 years. <sup>36</sup> Noncohabitation for 3 years. <sup>37</sup> 10 years. <sup>38</sup> 1 year, if contracted after marriage. <sup>39</sup> Gross neglect of duty. <sup>40</sup> Any other gross misbehavior or wickedness. <sup>41</sup> Absence of 2 years. <sup>42</sup> Infamous crime before marriage. <sup>43</sup> Fugitive from justice and absent for 2 years. <sup>44</sup> Absence of 5 years. <sup>45</sup> If at time of marriage and incurable. <sup>46</sup> Indignities. <sup>47</sup> Ungovernable temper. <sup>48</sup> Noncohabitation for 2 years. <sup>49</sup> Incompatibility. <sup>50</sup> Imprisonment for 2 years, sentence being for 7 years or more. <sup>51</sup> Noncohabitation for 5 years.



## Divorce Information, by State

Sources: Questionnaires to states; and U. S. Public Health Service.

State	Residence for divorce	Period before parties may remarry		Divorces <sup>1</sup>	
		Plaintiff	Defendant	1951 <sup>2</sup>	1952 <sup>2</sup>
Alabama.....	1 yr.	60 da. <sup>3</sup>	60 da. <sup>3</sup>	8,935	9,076
Arizona.....	1 yr.	1 yr.	1 yr.	4,240	4,906
Arkansas.....	90 da.	none	none	.....	.....
California.....	1 yr. <sup>21</sup>	1 yr.	1 yr.	38,542	41,398
Colorado.....	1 yr.	6 mo.	6 mo.	4,400 <sup>1</sup>	4,500 <sup>7</sup>
Connecticut.....	3 yr.	none	none	2,625	2,853
Delaware.....	2 yr.	none	none	625	547
D. C.....	1 yr. <sup>8</sup>	6 mo.	6 mo.	1,383	1,186
Florida.....	90 da.	none	none	18,675	20,468
Georgia.....	1 yr.	30 da.	30 da.	11,020	9,000 <sup>7</sup>
Idaho.....	6 wk.	none	none	2,569	2,586
Illinois.....	1 yr.	none	none	23,716	24,188
Indiana.....	1 yr.	none	none	12,524	12,789
Iowa.....	1 yr.	1 yr. <sup>18</sup>	1 yr. <sup>18</sup>	5,214	5,596
Kansas.....	1 yr.	6 mo.	6 mo.	4,722	5,312
Kentucky.....	1 yr.	none	none	.....	.....
Louisiana.....	1 yr.	none <sup>4</sup>	none <sup>8</sup>	.....	.....
Maine.....	6 mo.	none	none	2,048	2,207
Maryland.....	1 yr.	none	none	4,896	4,934
Massachusetts.....	5 yr.	6 mo.	2 yr.	6,413	6,003
Michigan.....	1 yr.	none	( <sup>9</sup> )	15,446	14,925 <sup>7</sup>
Minnesota.....	1 yr.	6 mo.	6 mo.	3,825	4,004
Mississippi.....	1 yr.	( <sup>10</sup> )	( <sup>10</sup> )	5,464	5,419
Missouri.....	1 yr.	none	none	12,131	12,943
Montana.....	1 yr.	none	none	1,837	1,989
Nebraska.....	1 yr.	6 mo.	6 mo.	2,356	2,403
Nevada.....	6 wk.	none	none	9,464	9,130
New Hampshire.....	1 yr.	none	none	1,085	1,119
New Jersey.....	2 yr.	none <sup>22</sup>	none <sup>22</sup>	5,675	5,036
New Mexico.....	1 yr. <sup>20</sup>	none	none	2,942	2,940
New York.....	( <sup>11</sup> )	none	3 yr. <sup>12</sup>	.....	.....
North Carolina.....	2 yr.	none	none	.....	5,857
North Dakota.....	1 yr.	( <sup>1</sup> )	( <sup>1</sup> )	611	590
Ohio.....	1 yr.	none	none	20,922	21,854
Oklahoma.....	1 yr.	6 mo.	6 mo.	.....	13,174 <sup>7</sup>
Oregon.....	1 yr.	6 mo.	6 mo.	6,133	6,311
Pennsylvania.....	1 yr.	none	none	11,768	11,946
Rhode Island.....	2 yr.	none	none	1,035	1,026
South Carolina.....	1 yr.	none	none	2,173	.....
South Dakota.....	1 yr.	none	none <sup>14</sup>	868	986
Tennessee.....	2 yr.	none	none <sup>18</sup>	7,069	7,754
Texas.....	1 yr.	1 yr. <sup>19</sup>	1 yr. <sup>19</sup>	37,330	37,300 <sup>6</sup>
Utah.....	3 mo.	6 mo.	6 mo.	2,259	2,263
Vermont.....	1 yr.	none	2 yr. <sup>15</sup>	585	610
Virginia.....	1 yr.	4 mo.	4 mo.	6,058	7,834
Washington.....	1 yr.	none	none	8,591	9,310
West Virginia.....	1 yr. <sup>16</sup>	60 da. <sup>17</sup>	60 da. <sup>17</sup>	.....	.....
Wisconsin.....	2 yr.	1 yr.	1 yr.	4,273	.....
Wyoming.....	60 da.	none	none	1,148	1,250 <sup>6</sup>

<sup>1</sup> Include reported annulments. <sup>2</sup> Leaders (....) indicate data unavailable. <sup>3</sup> Divorced persons may remarry each other at any time. <sup>4</sup> At discretion of court. <sup>5</sup> Incomplete. <sup>6</sup> 2 yr. if cause for divorce occurred outside D. C. <sup>7</sup> Estimated. <sup>8</sup> For husband; 10 mo. for wife. In case of adultery, guilty party cannot marry accomplice. <sup>9</sup> At discretion of court; or in case of children, 6-mo. waiting period mandatory. <sup>10</sup> Until court is adjourned that grants the divorce. <sup>11</sup> Action for divorce may be maintained where: (1) both parties were residents of state when offense was committed; (2) parties were married within state; (3) plaintiff was resident of state when offense was committed and is resident when action is commenced; (4) offense was committed within state and injured party is resident of state when action is commenced. <sup>12</sup> By modification of decree by court. <sup>13</sup> Party guilty of adultery may never marry the correspondent. <sup>14</sup> In case of adultery, guilty party may not marry, except to innocent party, until death of innocent party. <sup>15</sup> Period may be shortened by court. <sup>16</sup> 2 years if residence is acquired after cause of divorce action arose. No residence required in case of adultery if personal service set out by judge. <sup>17</sup> For cruelty only, but technically not usually observed. <sup>18</sup> Servicemen acquire residence by being continuously stationed at military base in state for 1 year. <sup>19</sup> Must have resided in county for 3 mo. <sup>20</sup> 3-mo. period between first and final judgment.

## Marriages and Divorces in the United States, 1890-1953

Source: U. S. Public Health Service.

Year	Marriages	Rate <sup>1</sup>	Divorces <sup>2</sup>	Rate <sup>1</sup>	Year	Marriages	Rate <sup>1</sup>	Divorces <sup>2</sup>	Rate <sup>1</sup>
1890.....	570,000	9.0	33,461	.5	1926.....	1,202,574	10.2	184,678	1.6
1895.....	620,000	8.9	40,387	.6	1927.....	1,201,053	10.1	196,292	1.6
1900.....	709,000	9.3	55,751	.7	1928.....	1,182,497	9.8	200,176	1.7
1901.....	742,000	9.6	60,984	.8	1929.....	1,232,559	10.1	205,876	1.7
1902.....	776,000	9.8	61,480	.8	1930.....	1,126,856	9.2	195,961	1.6
1903.....	818,000	10.1	64,925	.8	1931.....	1,060,914	8.6	188,003	1.5
1904.....	815,000	9.9	66,199	.8	1932.....	981,903	7.9	164,241	1.3
1905.....	842,000	10.0	67,976	.8	1933.....	1,098,000	8.7	165,000	1.3
1906.....	895,000	10.5	72,062	.8	1934.....	1,302,000	10.3	204,000	1.6
1907.....	936,936	10.8	76,571	.9	1935.....	1,327,000	10.4	218,000	1.7
1908.....	857,461	9.7	76,852	.9	1936.....	1,369,000	10.7	236,000	1.8
1909.....	897,354	9.9	79,671	.9	1937.....	1,451,296	11.3	249,000	1.9
1910.....	948,166	10.3	83,045	.9	1938.....	1,330,780	10.3	244,000	1.9
1911.....	955,287	10.2	89,219	1.0	1939.....	1,403,633	10.7	251,000	1.9
1912.....	1,004,602	10.5	94,318	1.0	1940.....	1,595,879	12.1	264,000	2.0
1913.....	1,021,398	10.5	91,307	.9	1941.....	1,695,999	12.7	293,000	2.2
1914.....	1,025,092	10.3	100,584	1.0	1942.....	1,772,132	13.2	321,000	2.4
1915.....	1,007,595	10.0	104,298	1.0	1943.....	1,577,050	11.7	359,000	2.6
1916.....	1,075,775	10.6	114,000	1.1	1944.....	1,452,394	10.9	400,000	2.9
1917.....	1,144,200	11.1	121,564	1.2	1945.....	1,612,992	12.2	485,000	3.5
1918.....	1,000,109	9.7	116,254	1.1	1946.....	2,291,045	16.4	610,000	4.3
1919.....	1,150,186	11.0	141,527	1.3	1947.....	1,991,878	13.9	483,000	3.4
1920.....	1,274,476	12.0	170,505	1.6	1948.....	1,811,155	12.4	408,000	2.8
1921.....	1,163,863	10.7	159,580	1.5	1949.....	1,579,798	10.6	397,000	2.7
1922.....	1,134,151	10.3	148,815	1.4	1950.....	1,667,231	11.1	385,144	2.6
1923.....	1,229,784	11.0	165,096	1.5	1951.....	1,594,694	10.4	381,000	2.5
1924.....	1,184,574	10.4	170,952	1.5	1952.....	1,539,318	9.9	392,000	2.5
1925.....	1,188,334	10.3	175,449	1.5	1953.....	1,566,793 <sup>3</sup>	9.9 <sup>3</sup>	.....	...

<sup>1</sup> Per 1,000 population. Divorce rates for 1917-19 and 1941-46 are based on population including armed forces overseas; for 1940 and 1947-52, on population excluding armed forces overseas. Marriage rates for 1917-19 and 1940-52 are based on population excluding armed forces overseas. <sup>2</sup> Includes annulments. <sup>3</sup> Marriage licenses. NOTE: Figures for marriages for all years include partial or complete estimates for some states; figures for divorces are estimated, except for 1900, 1905, 1922-32 and 1950.

## Marriage Prospects of Single Men and Women

Source: U. S. Bureau of the Census.

Age	Per cent of population single <sup>1</sup>		Per cent who ever marry <sup>2</sup>		Age	Per cent of population single <sup>1</sup>		Per cent who ever marry <sup>2</sup>	
	Male	Female	Male	Female		Male	Female	Male	Female
15.....	99.1	98.0	92.2	93.5	33.....	11.9	8.3	58.5	42.1
16.....	99.2	94.0	92.4	93.5	34.....	11.0	8.1	54.1	38.0
17.....	98.4	86.4	92.5	93.5	35.....	10.9	9.3	49.7	34.3
18.....	96.1	75.6	92.6	93.3	36.....	10.3	8.1	45.6	31.0
19.....	90.7	62.4	92.7	92.9	37.....	9.7	7.8	41.6	27.9
20.....	82.2	50.0	92.6	92.1	38.....	9.9	8.3	38.1	25.2
21.....	70.2	38.7	92.3	90.8	39.....	8.9	7.5	34.8	22.6
22.....	58.6	30.1	91.8	89.0	40.....	9.5	9.3	31.7	20.2
23.....	47.1	23.9	90.0	86.3	41.....	8.5	7.5	28.8	18.1
24.....	38.4	19.8	89.6	82.8	42.....	8.8	8.1	26.0	16.1
25.....	32.2	16.5	88.0	78.5	43.....	8.2	7.5	23.5	14.4
26.....	27.6	15.0	85.9	73.7	44.....	8.7	7.7	21.2	12.8
27.....	22.7	12.7	83.4	68.9	45.....	9.5	8.9	19.1	11.3
28.....	19.4	11.6	80.3	64.4	50.....	9.6	8.8	11.1	6.1
29.....	16.6	10.4	76.6	59.9	55.....	8.9	8.0	6.2	3.2
30.....	15.9	10.8	72.3	55.3	60.....	9.2	8.6	3.3	1.6
31.....	13.3	9.2	67.5	50.8	65 and over.....	8.3	8.9	1.9	0.8
32.....	13.1	9.2	63.0	46.4					

<sup>1</sup> Per cent single within specified year of age in 1950, in 3½% sample of population. <sup>2</sup> Per cent of persons single at beginning of year of age who marry during that year and all later years. NOTE: "Single" means those never married; that is, it excludes widowed and divorced. Hence, "marriage prospects" refers to likelihood of first marriage only.

## Hospital Facilities in the U. S., 1953

Source: American Medical Association.

State	General	Nervous & mental	Tuberculosis	Maternity	Industrial	Eye, ear, nose, throat	Children's	Other	TOTALS		
									Hospitals	Beds	Patients
Alabama.....	96	8	7	1	..	..	1	5	118	21,196	324,201
Arizona.....	51	1	10	..	..	..	..	4	66	7,285	121,467
Arkansas.....	73	2	2	..	2	..	1	1	81	14,513	187,648
California.....	278	47	26	10	3	1	5	36	406	113,958	1,454,637
Colorado.....	76	9	8	2	1	..	1	5	102	18,947	238,775
Connecticut.....	38	14	6	..	..	..	..	14	72	24,115	285,763
Delaware.....	10	3	1	..	..	..	..	2	16	4,646	43,178
D. C.....	17	2	1	2	..	1	1	6	30	15,916	173,495
Florida.....	119	7	4	2	..	1	1	12	146	24,634	385,538
Georgia.....	119	7	1	..	2	1	1	9	140	27,242	380,736
Idaho.....	45	3	1	1	..	..	..	2	52	4,650	82,084
Illinois.....	230	30	28	5	2	3	3	53	354	105,961	1,179,466
Indiana.....	104	16	11	..	1	1	..	8	141	32,634	465,816
Iowa.....	106	12	5	2	..	..	..	4	129	23,101	326,461
Kansas.....	123	7	2	1	2	..	..	7	142	18,960	275,357
Kentucky.....	93	11	10	..	1	..	1	5	121	23,540	337,424
Louisiana.....	106	7	5	1	1	1	..	4	125	23,749	403,190
Maine.....	40	6	4	..	..	..	..	2	52	8,872	94,612
Maryland.....	48	14	7	..	..	3	..	10	82	29,674	299,536
Massachusetts.....	140	33	21	3	..	2	3	18	220	69,213	639,578
Michigan.....	183	24	21	2	1	1	1	25	258	66,614	880,751
Minnesota.....	163	15	10	3	1	1	1	16	210	35,343	479,279
Mississippi.....	97	6	1	..	..	..	..	..	104	13,938	214,170
Missouri.....	110	15	6	6	3	..	2	15	157	38,600	472,676
Montana.....	56	1	1	..	1	1	..	1	61	6,080	115,606
Nebraska.....	103	5	1	2	..	..	1	5	117	13,977	194,392
Nevada.....	15	1	..	..	..	..	..	..	16	1,516	28,978
New Hampshire.....	32	3	2	..	..	..	..	4	41	6,512	80,480
New Jersey.....	92	17	15	2	..	1	1	28	156	53,593	545,060
New Mexico.....	38	4	5	..	1	..	..	2	50	5,364	90,332
New York.....	315	55	46	8	1	7	4	76	512	222,772	1,964,620
North Carolina.....	145	12	18	1	1	2	1	8	188	32,397	520,277
North Dakota.....	49	2	1	1	..	..	..	..	53	7,007	104,125
Ohio.....	165	29	24	9	1	1	3	22	254	73,836	1,019,581
Oklahoma.....	107	7	4	1	..	..	..	5	124	19,497	248,592
Oregon.....	64	6	4	1	..	..	..	5	80	12,398	208,757
Pennsylvania.....	232	40	16	5	..	4	4	42	343	110,943	1,272,502
Rhode Island.....	15	4	1	1	..	..	..	2	23	9,934	94,042
South Carolina.....	59	3	5	..	..	..	..	1	68	15,682	246,893
South Dakota.....	60	3	2	..	..	..	..	3	68	7,311	104,215
Tennessee.....	107	12	11	..	..	6	1	11	148	25,487	385,988
Texas.....	474	18	18	4	5	9	6	20	554	58,503	1,097,091
Utah.....	29	3	1	1	..	..	1	1	36	5,302	87,854
Vermont.....	22	3	2	..	..	..	..	1	28	4,223	55,383
Virginia.....	94	11	7	..	1	2	..	6	121	33,046	432,842
Washington.....	107	8	12	1	1	1	..	8	138	26,287	381,379
West Virginia.....	69	5	5	..	..	..	..	6	85	13,767	270,319
Wisconsin.....	141	40	20	1	..	..	1	13	216	36,172	516,338
Wyoming.....	32	3	1	..	..	..	..	..	36	4,107	57,577
Total, 1953.....	5,087 <sup>1</sup>	593 <sup>2</sup>	420 <sup>3</sup>	80 <sup>4</sup>	32 <sup>5</sup>	50 <sup>6</sup>	45 <sup>7</sup>	533 <sup>8</sup>	6,840 <sup>9</sup>	1,573,014	19,869,061
Total, 1952.....	4,924	585	428	83	31	51	45	518	6,665	1,541,615	18,914,847
Total, 1951.....	4,890	596	430	90	32	53	44	502	6,637	1,529,988	18,237,118
Total, 1950.....	4,713	579	431	92	27	51	44	493	6,430	1,456,912	17,023,513
Total, 1948.....	4,589	586	438	100	33	46	39	504	6,335	1,142,520	16,422,774
Total, 1945.....	4,744	563	449	106	36	42	44	527	6,511	1,738,944	16,257,402
Total, 1940.....	4,432	602	479	116	33	41	46	542	6,291	1,226,245	10,087,548

<sup>1</sup> Beds—patients admitted: 653,752—18,692,812; <sup>2</sup> 749,393—328,336; <sup>3</sup> 88,406—108,471; <sup>4</sup> 5,726—89,168; <sup>5</sup> 3,078—69,254; <sup>6</sup> 2,603—116,168; <sup>7</sup> 5,583—159,799. <sup>8</sup> Includes (hospitals—beds—patients admitted): orthopedic, 91—7,427—41,109; isolation, 28—3,516—24,859; convalescent and rest, 159—12,566—44,987; hospital departments of institutions, 160—20,981—124,106; all others, 95—20,084—69,993. <sup>9</sup> Classification by control: Federal, 392; state, 550; county, 713; city, 396; city-county, 85; church, 1,169; nonprofit associations, 2,206; individual and partnership, 900; corporations (profit unrestricted), 429.



## Sentenced Federal Prisoners Received from Courts, 1938-1953

Fiscal years ending June 30

Source: Federal Bureau of Prisons.

Offense	1938	1940	1945	1948	1950	1951	1952	1953
Counterfeiting & forgery.....	1,710	1,589	673	1,018	1,534	1,438	1,253	1,251
Drug laws: Marihuana.....	395	550	454	588	878	807	654	671
Narcotics.....	1,937	1,700	680	855	1,151	1,256	1,278	1,345
Embezzlement & fraud.....	704	750	340	531	609	535	558	536
Immigration laws.....	2,844	2,270	3,996	3,200	3,463	4,334	4,548	5,129
Income tax <sup>1</sup> .....	.....	.....	15	103	164	122	184	177
Juvenile delinquency.....	.....	216	911	677	658	684	695	830
Kidnaping.....	41	37	20	36	41	26	42	49
Liquor laws.....	10,520	10,735	2,988	1,838	2,304	2,323	2,247	2,149
National Bank & Federal Reserve Act.....	155	157	51	141	165	142	164	210
Theft from interstate commerce.....	358	313	475	430	270	327	307	254
Transportation, etc., of stolen motor vehicle.....	1,563	1,512	1,072	2,612	2,486	2,392	2,065	2,736
White-slave traffic.....	447	378	209	221	185	182	173	243
Govt. reservation, D. C., high seas & terr. cases.....	994	1,021	986	1,069	1,145	1,272	1,369	1,616
Other.....	1,859	1,719	1,742	1,795	2,031	2,038	1,917	1,610
National-security offenses:								
Selective Service Act of 1940.....	.....	.....	2,613	236	97	9	8	2
Selective Service Act of 1948.....	.....	.....	.....	.....	39	115	273	277
Other national-defense & security laws.....	.....	11	2,150	319	130	155	157	164
Military court-martial cases: Army.....	70	45	1,793	851	606	775	416	724
Navy.....	.....	.....	32	267	107	18	48	49
TOTAL ALL OFFENSES.....	23,597	23,003	21,200	16,787	18,063	18,950	18,896	20,022

<sup>1</sup> Commitments for income-tax violation not classified separately before 1943.

## Methods of Execution in the United States

State	Method	State	Method
Alabama.....	Electrocution	New Mexico.....	Electrocution
Arizona.....	Lethal gas	New York.....	Electrocution
Arkansas.....	Electrocution	North Carolina.....	Lethal gas
California.....	Lethal gas	North Dakota.....	No death penalty
Colorado.....	Lethal gas	Ohio.....	Electrocution
Connecticut.....	Electrocution	Oklahoma.....	Lethal gas <sup>2</sup>
Delaware.....	Hanging	Oregon.....	Lethal gas
D. C.....	Electrocution	Pennsylvania.....	Electrocution
Florida.....	Electrocution	Rhode Island.....	No death penalty
Georgia.....	Electrocution	South Carolina.....	Electrocution
Idaho.....	Hanging	South Dakota.....	Electrocution
Illinois.....	Electrocution	Tennessee.....	Electrocution
Indiana.....	Electrocution	Texas.....	Electrocution
Iowa.....	Hanging	Utah.....	Hanging
Kansas.....	Hanging		or shooting
Kentucky.....	Electrocution	Vermont.....	Electrocution
Louisiana.....	Electrocution	Virginia.....	Electrocution
Maine.....	No death penalty	Washington.....	Hanging
Maryland.....	Hanging	West Virginia.....	Electrocution
Massachusetts.....	Electrocution	Wisconsin.....	No death penalty
Michigan.....	No death penalty	Wyoming.....	Lethal gas
Minnesota.....	No death penalty	U. S. (Fed. Gov't.) ..	( <sup>1</sup> )
Mississippi.....	Lethal gas	Alaska.....	Hanging
Missouri.....	Lethal gas	American Samoa.....	Hanging
Montana.....	Hanging	Canal Zone.....	Hanging
Nebraska.....	Electrocution	Guam.....	Hanging
Nevada.....	Lethal gas	Hawaii.....	Hanging
New Hampshire.....	Hanging	Puerto Rico.....	No death penalty
New Jersey.....	Electrocution	Virgin Islands.....	Hanging

<sup>1</sup> Method shall be that used by state in which sentence is imposed. If state does not have death penalty, Federal judge shall prescribe method for carrying out death sentence. <sup>2</sup> Law passed in 1951 provides that death be inflicted by electrocution until lethal-gas chamber is available. NOTE: Method shown with each state is maximum penalty for murder and certain other crimes. In most states having capital punishment, jury or judge can specify whether sentence shall be death or life imprisonment.

## Distribution of Arrests by Sex, 1953

Source: Federal Bureau of Investigation.

(Data in this table are from reports furnished the FBI by 1,174 cities over 2,500 in population. This represents a total population of 37,255,808, based on the 1950 Census. The FBI points out that these 1953 figures are in no way comparable to figures issued for previous years.)

Offense charged	Males	Per cent	Females	Per cent	Total	Per cent
Criminal homicide:						
Murder & nonnegligent manslaughter.....	1,838	.1	361	.2	2,199	.1
Manslaughter by negligence.....	1,095	.1	96	(?)	1,191	.1
Robbery.....	11,285	.7	501	.3	11,786	.7
Aggravated assault.....	17,760	1.1	3,354	1.7	21,114	1.2
Other assaults.....	61,345	3.8	6,790	3.5	68,135	3.8
Burglary—breaking or entering.....	36,113	2.3	766	.4	36,879	2.1
Larceny— theft.....	58,695	3.7	9,500	4.9	68,195	3.8
Auto theft.....	19,870	1.2	521	.3	20,391	1.1
Embezzlement & fraud.....	9,698	.6	2,179	1.1	11,877	.7
Stolen property; buying, receiving, etc.....	2,474	.2	260	.1	2,734	.2
Forgery & counterfeiting.....	6,148	.4	1,003	.5	7,151	.4
Rape.....	4,023	.3	...	...	4,023	.2
Prostitution & commercialized vice.....	5,479	.3	14,866	7.7	20,345	1.1
Other sex offenses.....	11,197	.7	3,144	1.6	14,341	.8
Narcotic drug laws.....	4,787	.3	894	.5	5,681	.3
Weapons; carrying, possessing, etc.....	12,506	.8	679	.3	13,185	.7
Offenses against family & children.....	17,794	1.1	1,822	.9	19,616	1.1
Liquor laws.....	27,247	1.7	6,467	3.3	33,714	1.9
Driving while intoxicated.....	76,252	4.8	3,246	1.7	79,498	4.4
Disorderly conduct.....	166,757	10.4	32,791	16.9	199,548	11.1
Drunkenness.....	714,446	44.6	59,650	30.7	774,096	43.3
Vagrancy.....	66,445	4.2	9,309	4.8	75,754	4.2
Gambling.....	35,990	2.3	3,666	1.9	39,656	2.2
Suspicion.....	68,755	4.3	7,943	4.1	76,703	4.3
All other offenses.....	158,923	10.0	24,425	12.6	183,348	10.2
TOTAL ARRESTS, 1953.....	1,596,922	100.0	194,238	100.0	1,791,160	100.0

<sup>1</sup> Less than 1/10 of 1 per cent.

## Arrests by Age Groups, 1953

Age	Arrests	Age	Arrests	Age	Arrests	Age	Arrests	Age	Arrests
Under 15....	57,582	18.....	40,940	22.....	43,810	30-34.....	225,034	50 & over	303,223
15.....	24,346	19.....	39,160	23.....	47,832	35-39.....	217,139	Not known	961
16.....	30,487	20.....	33,494	24.....	49,764	40-44.....	199,269	TOTAL....	1,791,160
17.....	37,391	21.....	41,505	25-29.....	234,484	45-49.....	164,739		

## Estimated Number of Major Crimes in the U. S., 1946-53

Source: Federal Bureau of Investigation.

Crime	1946	1948	1950	1951	1952	1953
Murder and nonnegligent manslaughter.....	8,442	7,620	7,020	6,820	7,210	7,120
Manslaughter by negligence.....	4,701	5,390	5,330	5,510	5,650	5,690
Rape.....	12,117	16,180	16,580	16,800	17,240	17,900
Robbery.....	62,782	54,990	53,230	52,090	58,140	63,100
Aggravated assault.....	67,512	77,310	80,950	78,640	87,930	92,600
Burglary—breaking or entering.....	357,991	377,640	411,980	407,130	442,760	479,120
Larceny— theft.....	941,738	978,000	1,044,160	1,118,210	1,202,270	1,267,020
Auto theft.....	229,920	169,540	170,780	196,960	215,310	226,530
Total major crimes.....	1,685,203	1,686,670	1,790,030	1,882,160	2,036,510	2,159,080

## Motor Vehicle Laws as of 1954

Source: American Automobile Association.

State	Speed limit <sup>1</sup>	Date new license plates can be used	Driving license Required	Minimum age	Gasoline tax	Per cent sales tax	Period of stay <sup>2</sup>	Safety responsibility law	Certificate of title required
Alabama.....	60 F	Oct. 1	yes	16	\$.06	1	Reciprocal	yes	no
Arizona.....	60 B	Dec. 1	yes	18	.05	2	( <sup>4</sup> )	yes	yes
Arkansas.....	60	Jan. 1	yes	16	.065	2	30 days	yes	yes
California.....	55 pf	Jan. 1	yes	16	.06	3	( <sup>13</sup> )	yes	yes
Colorado.....	60 pf	Jan. 1	yes	16	.06	2	Reciprocal	yes	yes
Connecticut.....	45 J	Feb. 15	yes	16	.04	3 <sup>4</sup>	Reciprocal	yes	no
Delaware.....	50 C	( <sup>7</sup> )	yes	16	.05	...	Reciprocal	yes	yes
D. C.....	25 K	Mar. 1	yes	16	.05	2 <sup>3</sup>	Reciprocal	yes	yes
Florida.....	60 pf D	Feb. 20	yes	16	.07	...	Reciprocal	yes	yes
Georgia.....	55 K	Jan. 1	yes	16	.06	3	30 days	yes	no
Idaho.....	60 I	Dec. 15	yes	16	.06	...	Reciprocal	yes	yes
Illinois.....	A	On issue	yes	16	.05	2	Reciprocal	yes	yes
Indiana.....	65 <sup>18</sup>	Jan. 2	yes	16	.04	...	60 days	yes	yes
Iowa.....	A	Dec. 1	yes	16	.05	2	Reciprocal	yes	yes
Kansas.....	A	Jan. 1	yes	16	.05	2	Reciprocal	yes	yes
Kentucky.....	60 F	Dec. 29	yes	16	.07	3 <sup>3</sup>	Reciprocal	yes	( <sup>8</sup> )
Louisiana.....	60	Dec. 1	yes	15	.07	2	Reciprocal	yes	yes
Maine.....	45	Dec. 25	yes	15	.06	2	Reciprocal	yes	no
Maryland.....	50 E	Mar. 1	yes	16	.06	2	90 days	yes	yes
Massachusetts.....	40 pf A	Jan. 1	yes	16	.05	( <sup>9</sup> )	Reciprocal <sup>10</sup>	( <sup>11</sup> )	no
Michigan.....	A	Dec. 1	yes	16	.045	3	90 days	yes	yes
Minnesota.....	60 pf D	Nov. 1	yes	15	.05	...	Reciprocal	yes	no
Mississippi.....	60	Nov. 1	yes	17	.07	2	( <sup>13</sup> )	yes	no
Missouri.....	A	On issue	yes	16	.03	2	Reciprocal	yes	yes
Montana.....	A <sup>6</sup>	Jan. 1	yes	15	.06	...	30 days <sup>12,14</sup>	yes	yes
Nebraska.....	60 pf AF	Jan. 1	yes	15½	.06	...	( <sup>15</sup> )	yes	yes
Nevada.....	A	Dec. 1	yes	16	.055	...	No limit	yes	yes
New Hampshire.....	50	Mar. 1	yes	16	.05	...	Reciprocal	yes	no
New Jersey.....	50 K	Mar. 1	yes	17	.03	...	Reciprocal	yes <sup>19</sup>	yes
New Mexico.....	60 I	Dec. 15	yes	14	.06	2	( <sup>20</sup> )	yes	yes
New York.....	50 <sup>21</sup>	Jan. 1	yes	18	.04	...	Reciprocal	yes	no
North Carolina.....	55	Dec. 1	yes	16	.07	3 <sup>16</sup>	Reciprocal	yes	yes
North Dakota.....	50 pf AG	On issue	yes	16	.05	2	90 days <sup>22</sup>	yes	yes
Ohio.....	50 pf	Mar. 1	yes	16	.05	3	Reciprocal	yes	yes
Oklahoma.....	65 I	Dec. 11	yes	16	.065	2	60 days <sup>17</sup>	yes	yes
Oregon.....	A	On issue	yes	16	.06	...	Reciprocal	yes	yes
Pennsylvania.....	50	Mar. 15	yes	16	.05	...	Reciprocal	yes	yes
Rhode Island.....	50 H	Mar. 1	yes	16	.04	2	Reciprocal	yes	no
South Carolina.....	55	Sept. 15	yes	14	.07	3	90 days	yes	no
South Dakota.....	60 pf AF	Jan. 1	yes	15	.05	2 <sup>3</sup>	60 days	yes	yes
Tennessee.....	A	Mar. 1	yes	16	.07	2	30 days	yes	yes
Texas.....	60 pf AI	Feb. 1	yes	16	.04	1.1	Reciprocal	yes	yes
Utah.....	60 pf F	Dec. 15	yes	16	.05	2	Reciprocal	yes	yes
Vermont.....	50 <sup>23</sup>	Mar. 1	yes	16	.05	...	Reciprocal	yes	no
Virginia.....	55 <sup>24</sup>	Mar. 15	yes	15	.06	...	60 days	yes	yes
Washington.....	50 K	Jan. 1	yes	16	.065	3	Reciprocal	yes	yes
West Virginia.....	55	June 20	yes	16	.05	2	90 days	yes	yes
Wisconsin.....	65 I	On issue	yes	16	.04	...	Reciprocal	yes	yes
Wyoming.....	60 pf	Dec. 1	yes	15	.05	2	90 days	yes	yes

<sup>1</sup> A—reasonable and proper; B—lower speed at night and on old highways; C—55 mph on 4-lane highways; D—50 mph pf at night; E—55 mph on dual-lane highways; F—50 mph at night; G—60 mph where marked; H—45 mph at night; I—55 mph at night; J—parkways to 55 mph where marked; K—unless otherwise marked; pf—prima facie limit. <sup>2</sup> Applies to nonresidents. The term "reciprocal" means that the state will extend to a nonresident the identical privileges granted by his home state to nonresident motorists. In some states, visitors must register within a specified time. In most states, persons who intend to reside permanently must buy new plates and secure new driving license at once, or within a limited time. Acquisition of employment or placing children in public school is often considered intention to reside permanently. <sup>3</sup> Registry tax on first registration in state. <sup>4</sup> Visitor's permit required after 10 days. <sup>5</sup> Daytime; 55 mph at night. <sup>6</sup> Use tax on new cars, first registration of used cars. <sup>7</sup> Three months before current registration expires. <sup>8</sup> Bill of sale must be filed. <sup>9</sup> Excise tax. <sup>10</sup> Public liability insurance required after 30 days. <sup>11</sup> State has compulsory insurance. <sup>12</sup> Visitors must register immediately. <sup>13</sup> Until home-state license plates expire. <sup>14</sup> Extension granted. <sup>15</sup> Nebraska operator's license required in 30 days. <sup>16</sup> \$15 maximum. <sup>17</sup> Visitors must register within 15 days. <sup>18</sup> For automobiles; busses 55 mph; large trucks 45. <sup>19</sup> Called 1952 "Security-Responsibility Law." <sup>20</sup> As of July 1, 1953, nonresident car must bear valid registration plates of place of residence of owner. <sup>21</sup> 1953 law makes it traffic offense to drive unreasonably slowly. <sup>22</sup> As to commercial trucks, by agreement with other states. <sup>23</sup> Unless otherwise posted; trucks and busses 45 mph. <sup>24</sup> Passenger vehicles; trucks 45 mph.



## English Language Daily and Sunday U. S. Newspapers

(as of Sept. 30, 1953)

Source: Editor &amp; Publisher.

State	Morning papers & circulation		Evening papers & circulation		Total M & E & circulation		Sunday papers & circulation	
Alabama.....	3	174,205	15	397,984	18	572,189	13	500,773
Arizona.....	4	104,774	9	108,799	13	213,573	4	145,930
Arkansas.....	6	141,817	29	209,462	35	351,279	9	287,508
California.....	21	1,529,110	102	2,528,364	123	4,057,474	23	3,169,304
Colorado.....	5	182,201	22	358,623	27	540,824	10	605,325
Connecticut.....	6	172,123	20	510,033	26	682,156	6	429,109
Delaware.....	1	25,094	2	71,016	3	96,110	1	24,269
D. C.....	2	328,411	3	500,204	5	828,615	3	751,800
Florida.....	11	632,257	31	462,397	42	1,094,654	27	950,785
Georgia.....	5	333,226	24	475,488	29	808,714	10	741,317
Idaho.....	4	60,443	11	71,306	15	131,749	3	94,859
Illinois.....	9	1,410,928	78	2,308,223	87	3,719,151	17	3,333,787
Indiana.....	12	418,193	75	1,115,323	87	1,533,516	17	919,511
Iowa.....	4	300,910	40	623,804	44	924,714	7	792,126
Kansas.....	5	191,845	51	492,079	56	683,924	16	478,813
Kentucky.....	7	281,497	26	401,322	33	682,819	13	504,126
Louisiana.....	6	305,414	16	394,799	22	700,213	10	588,493
Maine.....	5	175,662	6	70,846	11	246,508	3	177,197
Maryland.....	4	209,693	8	504,778	12	714,471	3	659,951
Massachusetts.....	7	1,071,610	45	1,489,717	52	2,561,327	10	1,695,174
Michigan.....	2	459,410	52	1,758,844	54	2,218,254	12	1,954,308
Minnesota.....	4	337,837	26	639,943	30	977,780	5	873,386
Mississippi.....	5	69,477	15	171,085	20	240,562	8	161,848
Missouri.....	8	735,673	50	1,052,129	58	1,787,802	10	1,380,036
Montana.....	5	91,458	13	66,102	18	157,560	10	141,658
Nebraska.....	3	168,128	17	282,221	20	450,349	5	333,746
Nevada.....	2	22,833	6	41,755	8	64,588	2	34,554
New Hampshire.....	1	21,773	9	87,811	10	109,584	1	32,761
New Jersey.....	6	345,129	20	863,970	26	1,209,099	8	707,965
New Mexico.....	1	32,897	14	99,420	15	132,317	8	93,797
New York.....	23	4,701,421	71	3,574,070	94	8,275,491	20	9,732,990
North Carolina.....	9	466,692	38	475,618	47	942,310	16	617,370
North Dakota.....	3	56,095	9	91,434	12	147,529	2	83,345
Ohio.....	9	750,893	90	2,486,179	99	3,237,072	22	1,996,389
Oklahoma.....	8	285,655	44	404,449	52	690,104	41	647,618
Oregon.....	4	254,656	18	342,361	22	597,017	7	567,691
Pennsylvania.....	28	1,393,136	101	2,704,379	129	4,097,515	15	3,291,464
Rhode Island.....	1	46,299	6	233,891	7	280,190	2	184,198
South Carolina.....	8	286,838	9	132,690	17	419,528	7	314,503
South Dakota.....	1	3,000	11	148,724	12	151,724	6	106,159
Tennessee.....	8	473,864	22	508,385	30	982,249	12	786,582
Texas.....	24	1,042,574	88	1,527,471	112	2,570,045	77	2,227,496
Utah.....	1	91,281	4	131,501	5	222,782	4	215,213
Vermont.....	2	48,709	8	43,748	10	92,457	1	12,391
Virginia.....	10	357,481	23	396,390	33	753,871	13	531,737
Washington.....	6	308,435	19	578,535	25	886,970	10	826,871
West Virginia.....	9	240,745	22	274,735	31	515,480	9	393,781
Wisconsin.....	3	327,106	36	814,019	39	1,051,124	3	818,668
Wyoming.....	6	33,567	4	33,386	10	66,953	3	29,872
Total U. S.....	327	21,412,474	1,458	33,059,812	1,785	54,472,286	544	45,948,554
Total U. S., Sept. 30, 1952.....	327	21,159,527	1,459	32,791,088	1,786	53,950,615	545	46,210,136
Total U. S., Sept. 30, 1951.....	319	21,222,525	1,454	32,795,413	1,773	54,017,938	543	46,279,358
Total U. S., Sept. 30, 1950.....	322	21,266,126	1,450	32,562,946	1,772	53,829,072	549	46,582,348
Total U. S., Sept. 30, 1949.....	329	21,004,650	1,451	31,840,901	1,780	52,845,551	546	46,398,968
Total U. S., Sept. 30, 1948.....	328	21,081,905	1,453	31,203,392	1,781	52,285,297	530	46,308,081
Total U. S., Sept. 30, 1947.....	328	20,762,317	1,441	30,910,959	1,769	51,673,276	511	45,151,319
Total U. S., Sept. 30, 1946.....	334	20,545,908	1,429	30,381,597	1,763	50,927,505	497	43,665,364

## Leading Daily U. S. Newspapers

*Source: Audit Bureau of Circulations: Publishers' Statements for 6-mo. period ending Mar. 31, 1954.*

(NOTE: Where two or more newspapers are listed under a city, the order is according to size of total daily circulation.)

City and newspaper	Net Paid Circulation		
	Morning <sup>1</sup>	Evening <sup>1</sup>	Sunday
Akron (Ohio): BEACON JOURNAL		153,025	160,593
Albany (N. Y.): TIMES-UNION	58,853		115,663
Atlanta: CONSTITUTION (M); JOURNAL (E); JOURNAL & CONSTITUTION (S)	178,774	251,397	488,879
Baltimore: SUN	180,929 <sup>2</sup>	206,044 <sup>2</sup>	315,247
NEWS-POST (E); AMERICAN (S)		228,496 <sup>2</sup>	322,533
Birmingham: POST-HERALD (M); NEWS (E & S)	82,994	175,209	213,677
Boston: RECORD (M); AMERICAN (E); ADVERTISER (S)	380,867 <sup>2</sup>	189,367 <sup>2</sup>	561,603
HERALD (M & S); TRAVELER (E)	126,956 <sup>2</sup>	204,484 <sup>2</sup>	256,121
GLOBE	122,000 <sup>2</sup>	154,241 <sup>2</sup>	369,241
POST	269,150 <sup>2</sup>		215,767
CHRISTIAN SCIENCE MONITOR		179,368	
Buffalo: NEWS		293,452	
COURIER-EXPRESS	155,420		301,283
Charlotte (N. C.): OBSERVER	135,367		145,172
Chicago: TRIBUNE	877,636		1,458,729
NEWS		573,023 <sup>2</sup>	
SUN-TIMES	549,709 <sup>2,3</sup>		589,225
AMERICAN		527,620 <sup>2</sup>	802,691
Cincinnati: ENQUIRER	197,003		284,515
POST		168,650	
TIMES-STAR		157,176	
Cleveland: PRESS		308,526	
PLAIN DEALER	287,557		517,029
NEWS		137,193	
Columbus (Ohio): DISPATCH		166,083	231,934
CITIZEN		91,647	106,822
Dallas: NEWS	192,229		200,701
TIMES-HERALD		155,852	160,398
Dayton (Ohio): NEWS		142,588	168,921
Denver: POST		236,366 <sup>2</sup>	353,675
ROCKY MOUNTAIN NEWS	147,343		154,690
Des Moines: REGISTER (M & S); TRIBUNE (E)	228,004	144,341	535,570
Detroit: NEWS		451,237	561,830
FREE PRESS	432,858		477,131
TIMES		403,334	536,580
Fort Wayne (Ind.): JOURNAL-GAZETTE (M & S); NEWS-SENTINEL (E)	62,796	77,929	91,498
Fort Worth: STAR-TELEGRAM	116,880	129,513	230,401
Harrisburg (Pa.): PATRIOT (M); NEWS (E); PATRIOT-NEWS (S)	34,065	82,994	109,176
Hartford (Conn.): TIMES		109,766	
COURANT	83,868		130,518
Honolulu: ADVERTISER	47,107		62,968
Houston: CHRONICLE		190,568	216,551
POST	188,857		206,567
PRESS		124,256	
Indianapolis: STAR	197,800		302,557
NEWS		162,338	
Jacksonville (Fla.): TIMES-UNION	136,820		148,087
Kansas City (Mo.): STAR (E & S); TIMES (M)	342,961	351,193	370,285
Little Rock (Ark.): GAZETTE	94,316		105,593
Long Beach (Calif.): INDEPENDENT PRESS-TELEGRAM	40,776	93,308	120,541
Los Angeles: TIMES	412,167		808,669
EXAMINER	328,698		691,853
HERALD & EXPRESS		322,043 <sup>2</sup>	
MIRROR		251,364 <sup>2</sup>	
DAILY NEWS	193,706 <sup>2</sup>		
Louisville: COURIER-JOURNAL (M & S); TIMES (E)	207,215	171,654	306,673
Memphis: COMMERCIAL APPEAL (M & S); PRESS-SCIMITAR (E)	203,146	130,181	254,707
Miami: HERALD	244,295		284,929
NEWS		125,316	110,071
Milwaukee: JOURNAL		343,979	475,026
SENTINEL	179,458		234,977

<sup>1</sup> Unless otherwise indicated, figure is an average of the Monday-through-Saturday circulation. <sup>2</sup> Figure is an average of the Monday-through-Friday circulation; i.e., Saturday circulation, if any, has not been used in making the average. <sup>3</sup> Published all day. <sup>4</sup> Post office address is Garden City.

City and newspaper	Net Paid Circulation		
	Morning <sup>1</sup>	Evening <sup>1</sup>	Sunday
Minneapolis: STAR (E); TRIBUNE (M & S).....	199,518	287,557	625,199
Nashville: TENNESSEAN.....	114,899	.....	187,345
Nassau County <sup>4</sup> (Long Island, N. Y.): NEWSDAY.....	.....	209,677	.....
New Orleans: TIMES-PICAYUNE (M); STATES (E); TIMES-PICAYUNE-STATES(S) ITEM.....	181,263	102,216 <sup>2</sup>	286,759
New York: NEWS.....	2,039,799 <sup>2</sup>	111,942 <sup>2</sup>	3,803,374
MIRROR.....	865,102 <sup>2</sup>	.....	1,652,716
JOURNAL & AMERICAN.....	.....	669,700 <sup>2</sup>	891,489
TIMES.....	539,435 <sup>2</sup>	.....	1,201,133
WORLD-TELEGRAM & SUN.....	.....	531,469 <sup>2</sup>	.....
POST.....	.....	416,622 <sup>2</sup>	296,613
HERALD TRIBUNE.....	340,235 <sup>2</sup>	.....	556,188
LONG ISLAND PRESS (Jamaica, N. Y.).....	.....	213,468	224,946
WALL STREET JOURNAL (Eastern Edition).....	135,555 <sup>2</sup>	.....	.....
BROOKLYN EAGLE.....	.....	130,565 <sup>2</sup>	164,781
Newark (N. J.): NEWS.....	.....	272,631 <sup>2</sup>	295,448
STAR-LEDGER.....	194,822	.....	303,203
Norfolk-Portsmouth-South Norfolk: VIRGINIAN-PILOT (M & S); LEDGER-DISPATCH (E).....	102,790	64,933	118,118
Oakland (Calif.): TRIBUNE.....	.....	191,920	214,278
Oklahoma City: OKLAHOMAN (M & S); TIMES (E).....	153,341	110,591	263,397
Omaha: WORLD-HERALD.....	133,651	118,871	261,374
Philadelphia: BULLETIN.....	.....	711,758 <sup>2</sup>	716,143
INQUIRER.....	637,243 <sup>2</sup>	.....	1,169,184
NEWS.....	.....	179,951 <sup>2</sup>	.....
Phoenix: REPUBLIC (M & S); GAZETTE (E).....	85,446	59,606	119,460
Pittsburgh: PRESS.....	.....	292,493	488,519
POST-GAZETTE.....	264,990	.....	.....
SUN-TELEGRAPH.....	.....	198,808	461,274
Portland (Maine): PRESS-HERALD (M); EXPRESS (E); TELEGRAM (S).....	45,370	30,587	86,873
Portland (Oreg.): OREGONIAN.....	229,132	.....	292,332
JOURNAL.....	.....	188,406 <sup>2</sup>	211,046
Providence (R. I.): BULLETIN.....	.....	146,480	.....
JOURNAL.....	45,730	.....	180,698
Raleigh (N. C.): NEWS & OBSERVER.....	118,799	.....	128,305
Richmond (Va.): TIMES-DISPATCH (M & S); NEWS-LEADER (E).....	123,841	99,957	178,077
Rochester (N. Y.): DEMOCRAT & CHRONICLE (M & S); TIMES-UNION (E).....	115,846	117,958	172,228
Sacramento: BEE.....	.....	132,491	.....
St. Louis: POST-DISPATCH.....	.....	406,472 <sup>2</sup>	478,075
GLOBE-DEMOCRAT.....	293,012 <sup>2</sup>	.....	367,491
St. Paul: DISPATCH (E); PIONEER PRESS (M & S).....	90,644	120,134	175,946
Salt Lake City: TRIBUNE (M & S); DESERET NEWS-SALT LAKE TELEGRAM (E).....	90,475	87,374	173,946
San Antonio: EXPRESS (M); NEWS (E); EXPRESS-NEWS (S).....	72,144 <sup>2</sup>	63,668 <sup>2</sup>	115,630
LIGHT.....	.....	101,992 <sup>2</sup>	135,116
San Diego: EVENING TRIBUNE.....	.....	105,156	.....
UNION.....	69,790	.....	150,600
San Francisco: EXAMINER.....	224,128	.....	518,017
CHRONICLE.....	162,073	.....	257,592
CALL-BULLETIN.....	.....	138,319 <sup>2</sup>	.....
NEWS.....	.....	109,182 <sup>2</sup>	.....
Seattle: TIMES.....	.....	205,454 <sup>2</sup>	240,497
POST-INTELLIGENCER.....	189,314	.....	269,475
Shreveport (La.): TIMES (M & S); JOURNAL (E).....	81,698	51,340	92,846
Spokane (Wash.): SPOKESMAN-REVIEW.....	87,077	.....	143,224
Syracuse (N. Y.): HERALD-JOURNAL (E); HERALD-AMERICAN (S).....	.....	133,533	221,697
POST-STANDARD.....	87,593	.....	102,679
Tampa (Fla.): TRIBUNE.....	121,133	.....	134,840
Toledo: BLADE.....	.....	192,359	166,191
Tulsa (Okla.): WORLD (M & S); TRIBUNE (E).....	85,498	72,362	146,418
Washington (D. C.): POST & TIMES HERALD.....	383,495 <sup>2</sup>	.....	395,022
EVENING STAR; SUNDAY STAR.....	.....	247,368 <sup>2</sup>	276,810
NEWS.....	.....	147,046 <sup>2</sup>	.....
Wichita (Kans.): EAGLE.....	89,690	66,538	103,454
BEACON.....	.....	108,506	141,259
Winston-Salem: JOURNAL (M); TWIN CITY SENTINEL (E); JOURNAL-SENTINEL (S).....	52,229	34,202	65,408
Worcester (Mass.): TELEGRAM (M & S); GAZETTE (E).....	53,993	102,536	104,622
Youngstown (Ohio): VINDICATOR & TELEGRAM.....	.....	96,157	138,942



## The Leading Magazines of the United States

Source: Audit Bureau of Circulations: Publishers' Statements for period ending June 30, 1953.

Magazine or Magazine group	Circulation*	Magazine or Magazine group	Circulation*
American Comics Group	2,880,171	Marvel Comic Group	11,004,789
American Home	3,103,771	Modern Screen	1,278,651
American Legion Magazine	2,817,750	National Comics Group	7,193,478
American Magazine	2,614,150	National Geographic Magazine	2,132,231
Archei Comic Group	3,312,461	Parents' Magazine	1,462,064
Better Homes & Gardens	3,779,359	Pathfinder	1,231,180
Collier's, The National Weekly	3,171,910	Photoplay	1,434,176
Coronet	2,818,003	Popular Mechanics Magazine	1,350,014
Cosmopolitan	1,703,177	Popular Science Monthly	1,294,285
Dell Modern Group	2,706,702	Quality Comic Group	1,866,056
Family Circle	3,535,164†	Quick	1,318,150
Fawcett Comics Group	3,623,741†	Reader's Digest	†
Fawcett True Confessions, Motion Picture and Television Magazine	2,552,127	Redbook Magazine	2,027,025
Good Housekeeping	3,412,955	Saturday Evening Post	4,583,064
Harvey Comics Group	4,676,374	Standard Comics Group	2,850,333
Hillman Women's Group	1,003,306	Thrilling Fiction Group	1,035,323
Household	2,335,625	Time	1,760,312
Ideal Women's Group	1,201,051	Today's Woman	1,161,667
Ladies' Home Journal	5,027,082	True	1,739,088
Lev Gleason Comic Group	1,860,616	True Confessions	1,620,329
Life	5,474,080	True Story	2,398,245
Look	3,405,345	True Story Women's Group	6,065,962
McCall's Magazine	4,525,060	Woman's Day	3,690,750
Macfadden Men's Group	1,384,883	Woman's Home Companion	4,442,238
		Workbasket	1,633,680
		Young Romance Group	1,864,936

\* Net paid circulation. † The publisher's figure is about 10,500,000, since the magazine does not take advertising, A.B.C. does not publish the circulation. ‡ For period ending June 30, 1952. NOTE: This table does not include farm magazines.

## Radio Stations and Networks

Source: National Association of Radio and Television Broadcasters.

Major networks	Standard Broadcast Stations (Jan. 1, 1954)		
	Owned and operated	Affiliated	
ABC—American Broadcasting Company	5	360	
CBS—Columbia Broadcasting System	6	214	
MBS—Mutual Broadcasting System	0	571	
NBC—National Broadcasting Company	5	207	

No. of stations* (Jan. 1, 1954)	Permits for construction		
	Operating	Permits for construction	Total
Standard Broadcast	2,521	115	2,636
Television	356†	211	567
FM (Frequency Modulation)	560‡	20	580

\* Including territories and possessions. † Includes 101 licensed and 255 CP's operating on special temporary authority. ‡ Includes 27 CP's operating on special temporary authority.

## Birthstones

Source: Jewelry Industry Council

January	Garnet	July	Ruby
February	Amethyst	August	Peridot or Sardonyx
March	Aquamarine or Bloodstone	September	Sapphire
April	Diamond	October	Opal or Tourmaline
May	Emerald	November	Topaz
June	Pearl, Alexandrite or Moonstone	December	Turquoise or Zircon

## Patents

A patent, in the most general sense, is a document issued by a government, conferring some special right or privilege. The term is now restricted mainly to patents for inventions; occasionally, land patents.

The grant of a patent for an invention gives the inventor the privilege, for a limited period of time, of excluding others from practicing a certain art or from making, using, or selling a certain article. However, it does not give him the right to make, use, or sell his own invention if it is an improvement on some unexpired patent whose claims are infringed thereby.

In the U. S., the law provides that a patent may be granted, for a term of 17 years, to any person who has invented or discovered any new and useful art, machine, manufacture, or composition of matter, as well as any new and useful improvements thereof. A patent may also be granted to a person who has invented or discovered and asexually reproduced a new and distinct variety of plant (other than a tuber-propagated one) or has invented a new, original, and ornamental design for an article of manufacture.

A patent is granted only upon a regularly filed application, complete in all respects; upon payment of the fees; and

upon determination that the disclosure is complete and that the invention is new and useful. The disclosure must be of such nature as to enable others to reproduce the invention.

A complete application, which must be addressed to the Commissioner of Patents, Washington, D. C., consists of a petition, specification and claims, oath, drawing (whenever the nature of the case admits of it), and a filing fee of \$30 for cases having 20 claims or less. An additional fee of \$1 per claim is required for cases having more than 20 claims. The filing fee is not returned to the applicant if the patent is refused. If the patent is allowed, another fee of \$30 (and \$1 each for claims allowed in excess of 20) is required before the patent is issued. The fees for design patents vary.

Applications are considered strictly in the order in which they are received. Patents are not granted for printed matter, for methods of doing business, or for devices for which claims contrary to natural laws are made. Applications for a perpetual-motion machine have been made from time to time, but until a working model is presented that actually fulfills the claim, no patent will be issued.

## Trade-Marks

A trade-mark may be defined as a word, letter, device, or symbol, as well as some combination of these, which is used in connection with merchandise and which points distinctly to the origin or ownership of the article to which it is applied.

Certificates of registration of trade-marks are issued under the seal of the Patent Office and may be registered by the owner if he is engaged in interstate or foreign commerce, since any federal jurisdiction over trade-marks arises under the commerce clause of the Constitution. Trade-marks may be registered by foreign owners who comply with our law, as well as by citizens of foreign countries with which the U. S. has treaties relating to trade-marks. American citizens may register trade-marks in foreign countries by

complying with the laws of those countries. The right to registration and protection of trade-marks in many foreign countries is guaranteed by treaties.

General jurisdiction in trade-mark cases is given to the federal courts. Decisions of examiners on applications or oppositions are subject to appeal to the Commissioner of Patents, and from him to the U. S. Court of Customs and Patent Appeals. Before adopting a trade-mark, a person should make a search of prior marks in order to avoid infringing unwittingly upon them.

The duration of a trade-mark registration is 20 years, but it may be renewed indefinitely for 20-year periods, provided the trade-mark is still in use at the time of expiration.

## Television Statistics

Source: MART Magazine, Caldwell-Clements, Inc.

Year	TV sets mfd.	Retail value	Picture tubes mfd.	Retail value	TV stations on air	Homes with TV	TV sets in use in U. S.
1946.....	10,000	\$ 5,000,000	20,000	\$ 1,000,000	5	8,000	8,000
1947.....	250,000	100,000,000	300,000	15,000,000	20	250,000	250,000
1948.....	1,000,000	350,000,000	1,500,000	75,000,000	44	1,000,000	1,000,000
1949.....	3,000,000	950,000,000	3,500,000	210,000,000	100	4,000,000	4,000,000
1950.....	7,500,000	2,700,000,000	8,000,000	400,000,000	107	10,400,000	10,500,000
1951.....	5,600,000	2,100,000,000	6,000,000	300,000,000	108	15,500,000	15,750,000
1952.....	6,300,000	2,360,000,000	6,500,000	260,000,000	123	21,000,000	22,210,000
1953.....	7,300,000	1,675,000,000	9,000,000	360,000,000	350	26,000,000	28,000,000
1954.....	6,200,000	1,116,000,000	10,300,000	360,500,000	440	28,500,000	31,700,000

## Copyrights

A copyright is a statutory right obtained by authors, musicians and artists or their assigns, upon compliance with the provisions of the copyright law, to prevent the reproduction of their works without their consent. The U. S. Constitution (Article I, Section 8) empowers Congress "to promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries." The possession of a copyright prevents reproduction by writing, printing, copying, or imitation of the copyrighted article. Among some of the other rights possessed by the copyright owner are the exclusive rights to translate and dramatize literary works, to control public performance of dramas, and, in the case of nondramatic literary works and musical compositions, to control public performance for profit. Special provisions in regard to mechanical reproductions of musical compositions are included. Copyright protection extends to books; pamphlets; periodicals and contributions to periodicals; lectures, sermons, and monologues; dramas and dramatical musical compositions; musical compositions; maps; works of art or models and designs for works of art; reproductions of a work of art; drawings or plastic works of scientific or technical character; photographs, prints, and pictorial illustrations; commercial prints and labels; and motion pictures.

Copyright term endures 28 years from date of registration in the Copyright Office for unpublished material and from the date of publication for published works. The copyright may be renewed for an additional period of 28 years, provided application for such renewal is made within one year prior to the date of expiration of the original term. The copyright of a book or similar publication is secured by publication of such work after printing on the title page, or the page immediately following, the required copyright notice. This notice consists of the word *Copyright* or the abbreviation *Copr.*,

the year of publication, and the name of the copyright owner. It is important to bear in mind that copyright comes into being at the time of first publication if this required notice appears on the work. If publication occurs without this notice, the work falls into the public domain, and the Copyright Office cannot register the claim. In short, the Copyright Office does not grant copyrights; the obtaining of such protection depends on whether or not the claimant follows the statutory formalities at the time of publication. In view of the fact that those formalities vary with the different classes of works subject to copyright, persons interested in securing copyright should obtain circular No. 35 from the Register of Copyrights, Library of Congress, Washington 25, D. C.

The law requires that, promptly after the work has been published, two copies thereof (foreign works, one copy) must be promptly deposited in the Copyright Office. These copies should be accompanied by the proper application form and the statutory fee of \$4. If the work is a commercial print or label used in connection with the sale or advertisement of an article of merchandise, the fee is \$6.

Effective June 3, 1949, the term of ad interim protection for books and periodicals in the English language first published abroad was extended to five years. Such works may be imported into the U. S. up to a total of 1,500 copies after ad interim registration has been obtained. The above amendment to the law also affords to the foreign author or publishers an option of obtaining registration without payment of the usual statutory fee if an extra copy of the work, accompanied by a catalogue card, is submitted to the Copyright Office within six months of the date of first publication abroad.

Copies of application forms may be obtained from the Copyright Office free upon request. The Office also publishes, in Bulletin 14, the U. S. copyright law. This bulletin can be purchased for 20c upon application to the Register of Copyrights.

## Radio and Phonograph Statistics for U. S.

Source: MART Magazine, Caldwell-Clements, Inc.

Type	Number*	Type	Number†
Radios: Homes with.....	50,000,000	Turntables: 78 rpm only.....	12,925,000
Secondary sets in homes.....	37,000,000	33 rpm only.....	800,000
Sets in business, etc.....	8,000,000	45 rpm only.....	2,500,000
Automobile radios.....	30,000,000	78 and 33 rpm.....	275,000
Total radios.....	125,000,000	3-speed.....	7,470,000
Radio operators licensed.....	745,000	Total turntables.....	23,970,000
Amateur stations.....	119,000		

\* In operation as of Jan. 1, 1954. † In operation as of Jan. 1, 1953. NOTE: Radio sets in rest of world: North America (except U. S.), 11,000,000; South America, 12,000,000; Europe, 71,000,000; Asia, 18,000,000; Australia, 6,800,000; Africa, 3,900,000. Total sets in world (including U. S.): 263,000,000.



## EDUCATION

## Elementary and Secondary Public School Statistics, 1952-53

Source: Information Please Almanac Questionnaire.

Note: The number of schools includes rural and one-room school houses. The number of pupils includes only full-time students. The average yearly expenditure is based on the average daily attendance.

State	Elementary			Secondary			Average yearly expenditure per pupil	Average yearly salary of teachers
	No. schools	No. pupils	No. teachers	No. schools	No. pupils	No. teachers		
Alabama <sup>1</sup> .....	( <sup>2</sup> )	437,297	13,255	( <sup>2</sup> )	248,724	9,373	\$129.66	\$2,532.00
Arizona.....	421	151,605	4,634	74	36,825	1,475	270.62	4,254.00
Arkansas.....	1,509	271,545	7,725	604	144,487	5,427	140.00	1,981.00
California.....	3,991	1,515,577	43,492	788	416,458	22,863	285.43	4,266.00
Colorado.....	1,124	192,018	6,357	339	54,709	3,889	262.49	( <sup>3</sup> )
Connecticut.....	699	247,119	8,047	129	83,515	4,026	296.28	3,942.00
Delaware.....	145	33,593	1,173	34	19,131	986	322.38	4,113.00
Washington, D. C. <sup>4</sup> .....	122	63,046	1,757	37	36,814	1,618	286.73	4,318.00
Florida <sup>5</sup> .....	1,320	384,250	11,921	472	218,008	8,409	201.56	3,339.67 <sup>6</sup>
Georgia.....	1,858	632,608	18,309	683	201,628	8,507	159.21	2,758.67
Idaho <sup>7</sup> .....	532	98,006	3,260	135	33,825	1,377	250.40	2,980.50
Illinois.....	2,087 <sup>7</sup>	1,027,950	34,649	296 <sup>7</sup>	324,557	15,493	278.05	3,845.64
Indiana <sup>8</sup> .....	2,164	592,409	16,743	762	179,183	9,051	250.49	3,783.00
Iowa.....	5,830 <sup>8</sup>	390,912	15,628	910 <sup>8</sup>	120,021	8,336	360.62	3,200.00
Kansas.....	3,191	270,676	11,666	607	91,424	5,191	267.49	3,024.35
Kentucky.....	4,101 <sup>9</sup>	479,912	13,084	121 <sup>9</sup>	103,983	5,587	143.00	2,250.00 <sup>10</sup>
Louisiana.....	( <sup>10</sup> )	430,224	12,450	( <sup>10</sup> )	101,434	6,211	225.05	3,250.00
Maine <sup>11</sup> .....	1,311	126,052	4,630	191	34,669	1,943	208.32	2,409.00
Maryland <sup>12</sup> .....	810	260,202	8,085 <sup>11</sup>	217	138,728	6,255 <sup>11</sup>	249.72	3,863.00
Massachusetts.....	1,705	439,251	16,834 <sup>11</sup>	333	201,293	10,353 <sup>11</sup>	257.12 <sup>12</sup>	3,970.00 <sup>11</sup>
Michigan <sup>13</sup> .....	( <sup>14</sup> )	736,012 <sup>4</sup>	28,827 <sup>4</sup>	( <sup>14</sup> )	383,922 <sup>4</sup>	15,489 <sup>4</sup>	346.06	3,721.00
Minnesota.....	4,376	346,069	12,849	653	193,776	9,633	298.00	3,292.00
Mississippi.....	3,268	454,896	10,987	759	89,509	4,237	85.99	1,834.35
Missouri.....	5,064	536,829	17,118	650	151,288	6,476	279.45	2,968.00
Montana.....	1,222	84,829	3,917	176	27,950	1,573	315.68	3,354.00
Nebraska.....	4,692	181,958	8,835	504	60,309	3,250	245.31	2,683.05
Nevada.....	188	31,267	1,036	39	7,948	365	253.18	3,526.00
New Hampshire.....	( <sup>14</sup> )	60,067	2,227	( <sup>14</sup> )	18,991	1,026	246.34	( <sup>15</sup> )
New Jersey.....	1,522	573,970	18,786	270	188,997	8,306	296.06	3,971.00
New Mexico.....	625	134,041	( <sup>16</sup> )	116	32,653	( <sup>16</sup> )	260.62	3,942.44 <sup>17</sup>
New York.....	4,197	1,697,183	62,532	989	528,665	25,033	350.51	4,300.00
North Carolina.....	2,304	728,415	22,328	300	200,608	7,772	177.00 <sup>12</sup>	3,205.00 <sup>12</sup>
North Dakota.....	3,000	90,198	4,959	380	28,107	1,787	253.08	2,617.13
Ohio.....	2,929	949,843	28,834	1,143	437,940	19,417	242.88	3,650.61
Oklahoma.....	2,694	391,098	11,285	1,024	121,920	7,429	220.00	3,137.60
Oregon.....	1,059	224,286	8,859	222	71,514	3,648	319.41	3,834.00
Pennsylvania.....	5,989	963,365	35,909 <sup>8</sup>	1,073	597,469	27,036 <sup>8</sup>	357.30 <sup>13</sup>	3,652.00
Rhode Island.....	292	82,661	2,963	62	22,727	1,237	239.99	3,800.00
South Carolina.....	2,444	391,887	12,191	428	133,124	5,403	155.00	2,475.00
South Dakota.....	3,375	95,210	5,345	272	30,112	1,920	300.64	2,585.30
Tennessee.....	3,644	553,998	( <sup>18</sup> )	491	134,987	( <sup>19</sup> )	144.13	2,550.00
Texas.....	4,057	1,190,134	36,007	1,818	320,318	20,163	302.38	3,339.00
Utah.....	372	108,883	2,964	147	67,011	2,353	209.15	3,428.21
Vermont.....	714	52,800	1,915	81	13,078	791	209.22	2,601.40
Virginia.....	2,520	495,211	14,031	529	164,964	7,589	170.98	2,824.00
Washington.....	1,107	348,020	9,910	381	156,824	5,683	264.12	3,851.06
West Virginia.....	3,535	294,794	10,314	381	151,916	5,989	173.37	2,994.45 <sup>4</sup>
Wisconsin.....	5,403 <sup>8</sup>	397,894	15,684	444	153,297	7,565	260.56	3,473.00
Wyoming.....	577	49,599	1,911	86	14,794	877	317.03	3,364.00

<sup>1</sup> Elementary schools, grades 1-6; secondary schools, grades 7-12. <sup>2</sup> The combined figure for elementary and secondary schools was 3,105 in 1951-52. <sup>3</sup> 1953-54: Elementary school teachers \$3,264; secondary schools \$3,766. <sup>4</sup> Elementary schools, kindergarten through grade 6; secondary schools, grades 7 through 12. <sup>5</sup> Elementary schools, kindergarten through grade 6; secondary schools, grades 7-14. <sup>6</sup> Includes supervisors, principals, etc. <sup>7</sup> Number of school districts; in addition there are 319 unit districts. <sup>8</sup> School year 1951-52. <sup>9</sup> Plus 396 combined elementary and secondary schools. <sup>10</sup> The combined figure for elementary and secondary schools is 1,746. <sup>11</sup> Includes principals. <sup>12</sup> Estimated. <sup>13</sup> The combined figure for elementary and secondary schools is 4,736. <sup>14</sup> The combined figure for elementary and secondary schools is 581. <sup>15</sup> Elementary school teachers, \$2,879; secondary school teachers, \$3,352. <sup>16</sup> The combined figure for elementary and secondary teachers is 5,690. <sup>17</sup> Municipal schools only; rural schools \$3,510.06. <sup>18</sup> The combined figure for elementary and secondary teachers is 24,532.

## State Compulsory School Attendance Laws

State	Enactment*	Age limits	State	Enactment*	Age limits
Alabama	1915	7-16	Nebraska	1887	7-16
Arizona	1899	8-16	Nevada	1873	7-18
Arkansas	1909	7-16	New Hampshire	1871	8-16
California	1874	8-16	New Jersey	1875	7-16
Colorado	1889	8-16	New Mexico	1891	6-17
Connecticut	1872	7-16	New York	1874	7-16
Delaware	1907	7-16	North Carolina	1907	7-16
D. C.	1864	7-16	North Dakota	1883	7-17
Florida	1915	7-16	Ohio	1877	6-18
Georgia	1916	7-16	Oklahoma	1907	7-18
Idaho	1887	7-16	Oregon	1889	7-16
Illinois	1883	7-16	Pennsylvania	1895	8-17
Indiana	1897	7-16	Rhode Island	1883	7-16
Iowa	1902	7-16	South Carolina	1915	7-16
Kansas	1874	7-16	South Dakota	1883	7-16
Kentucky	1896	7-16	Tennessee	1905	7-16
Louisiana	1910	7-16	Texas	1915†	7-16
Maine	1875	7-17	Utah	1890	8-18
Maryland	1902	7-16	Vermont	1867	7-16
Massachusetts	1852	7-16	Virginia	1908	7-16
Michigan	1871	6-16	Washington	1871	8-16
Minnesota	1885	8-16	West Virginia	1897	7-16
Mississippi	1918	7-16	Wisconsin	1879	7-16
Missouri	1905	7-16	Wyoming	1876	7-16
Montana	1883	8-16			

\* Date of enactment of 1st compulsory school attendance law. † A compulsory school attendance law was contained in a law of 1873 establishing free public schools. However, the provision was omitted in superseding legislation passed in 1876.

## Statistics of State School Systems, 1940 to 1951

Source: U. S. Office of Education.

Years	Enrollment						High-school graduates	Current expense per pupil in average daily attendance	Expenditure for textbooks free to pupils
	Total	Elementary schools		Secondary schools					
		Boys	Girls	Boys	Girls	Boys			
1940-1941 . . .	25,296,138	9,529,587	9,052,638	3,273,606	3,440,307	536,715	615,508	\$ 92.38	\$26,076,002
1941-1942. . .	24,562,473	9,336,067	8,838,601	3,089,434	3,298,371	535,156	626,043	98.31	27,012,724
1942-1943. . .	24,155,146	9,237,002	8,796,078	2,891,633	3,230,433	489,115	597,383	104.85	27,090,248
1943-1944. . .	23,266,616	9,081,270	8,631,826	2,553,356	3,000,164	393,418	559,836	116.99	23,987,277
1944-1945. . .	23,225,784	9,053,952	8,611,642	2,565,699	2,994,491	384,673	559,863	125.41	23,954,676
1945-1946. . .	23,299,941	9,098,013	8,579,731	2,633,117	2,989,080	418,725	555,682	136.41	27,447,595
1946-1947. . .	23,659,158	9,187,105	8,634,376	2,822,633	3,015,044	505,218	568,461	152.80	29,805,963
1947-1948. . .	23,944,532	9,429,268	8,861,959	2,747,061	2,906,244	507,649	565,529	179.43	37,553,364
1948-1949. . .	24,476,658	9,707,391	9,110,863	2,759,298	2,899,106	499,984	557,960	197.65	43,481,000
1949-1950. . .	25,111,000	10,018,000	9,387,000	2,812,000	2,895,000	505,394	558,050	208.83	48,076,000
1950-1951. . .	25,706,000	10,275,000	9,625,000	2,846,000	2,960,000	496,700	545,900	224.00	52,814,000

## Vocational- and Special-School Enrollment, 1952\*

Source: U. S. Office of Education.

Type of class	Agriculture	Distributive occupations	Home economics	Trades & industry	Total
Evening	271,160	148,268	578,999	327,478	1,325,905
Part-time	48,460	86,716	80,577	258,978	474,731
All-day	426,782	.....	731,813	206,757	1,365,352
All types	746,402	234,984	1,391,389	793,213	3,165,988

\* Provisional figures, subject to final review of state reports.

## Enrollment in Full-time Day Schools, 1899-1950

Source: U. S. Office of Education.

Type of school	1899-1900	1909-1910	1919-1920	1929-1930	1939-1940	1949-1950
Kindergartens: Public.....	131,657	293,970 <sup>1</sup>	481,266	723,443	594,647	1,034,203
Nonpublic.....	93,737	52,219 <sup>1</sup>	29,683	54,456	57,341	133,000
Residential schools for exceptional children.....	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	5,164 <sup>3</sup>	5,777	4,459
Elementary schools: Public.....	14,852,202	16,604,821	18,897,661	20,555,150	18,237,451	18,370,490
Nonpublic.....	1,147,188	1,506,218	1,455,878	2,255,430	2,095,938	2,574,777
Residential schools for exceptional children.....	37,062	71,307	99,234 <sup>4</sup>	124,153 <sup>5</sup>	55,954	48,894
Other <sup>6</sup> .....	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	59,547	35,682
Total kindergartens and elementary schools.....	16,261,846	18,528,535	20,963,722	23,717,796	21,106,655	22,201,505
Secondary schools: Public high schools.....	519,251	915,061	2,200,389	4,399,422	6,601,444	5,706,734
Nonpublic high schools.....	110,797	117,400	213,920	341,158	457,768	672,362
Residential schools for exceptional children.....	3,500	4,005	4,500 <sup>4</sup>	4,388	9,727	9,784
Other <sup>7</sup> .....	65,855	78,932	81,367	59,287	54,070	38,162
Total secondary schools.....	699,403	1,115,398	2,500,176	4,804,255	7,123,009	6,427,042
Higher education: Publicly controlled <sup>8</sup> .....	90,689	116,560	315,382	532,647	796,531	1,354,902
Privately controlled <sup>8</sup> .....	146,903	188,655	282,498	568,090	697,672	1,304,119
Total higher education.....	237,592	355,215	597,880	1,100,737	1,494,203	2,659,021

<sup>1</sup> 1911-12. <sup>2</sup> Data not available. <sup>3</sup> 1926-27. <sup>4</sup> 1917-18. <sup>5</sup> Distribution by control estimated before 1939-40. <sup>6</sup> Elementary grades in college and teacher-training elementary schools. <sup>7</sup> Secondary grades in college and teacher-training secondary schools.

## Estimated Public and Private School Enrollment, 1953-54

Source: U. S. Office of Education.

Type of school	Enrollment	Type of school	Enrollment
<b>Elementary schools*</b>		<b>Higher Education</b>	
Public.....	23,369,000	Universities, colleges, professional schools, including junior colleges and normal schools....	2,500,000
Private and parochial.....	3,417,000	<b>Other schools</b>	
Residential schools for exceptional children.....	65,000	Private commercial schools.....	131,000
Model and practice schools in teacher-training institutions.....	43,600	Nurse-training schools (not affiliated with colleges and universities).....	85,000
Federal schools for Indians.....	36,700	Total other schools.....	216,000
Total elementary.....	26,931,300	Grand total.....	36,949,700
<b>Secondary schools</b>		NOTE: These estimates include enrollments for the entire school or college year; they are not restricted to September enrollments alone.	
Public.....	6,421,000		
Private and parochial.....	818,000		
Residential schools for exceptional children.....	11,100		
Model and practice schools in teacher-training institutions and preparatory dept. of colleges..	44,800		
Federal schools for Indians.....	7,500		
Total secondary.....	7,302,400		

\* Including kindergartens. † Revised since originally published.

## Number Surviving Through College per 1,000 Pupils

Source: U. S. Office of Education.

Grade or year	1931-1932	1932-1933	1933-1934	1934-1935	1935-1936	1936-1937	1937-1938	1938-1939	1939-1940	1940-1941	1941-1942	1942-1943
Elementary: Fifth*	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Sixth.....	929	935	944	953	946	954	954	955	963	968	952	954
Seventh.....	884	889	895	892	889	895	901	908	916	910	905	909
Eighth.....	818	831	836	842	839	849	850	853	846	886	834	847
High School: I.....	780	786	792	803	814	839	811	796	781	781	789	807
II.....	651	664	688	711	725	704	679	655	673	697	698	713
III.....	546	570	594	610	587	554	519	532	552	566	581	604
IV.....	481	510	489	512	466	425	428	444	476	507	514	533
Graduates.....	432	455	462	467	439	393	398	419	450	481	488	505
Year of graduation.....	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950
College: I.....	154	160	142	129	119	121	†	†	†	†	†	225
Graduates.....	69	47	49	51	†	†	.....	.....	.....	.....	.....	.....
Year of graduation.....	1943	1944	1945	1946	1947	1948	.....	.....	.....	.....	.....	.....

\* Fourth grade in 11-grade system; fifth grade in 12-grade system. † Because of veteran students, it is not possible to calculate retention rates.



## White and Negro School Statistics, 1949-50

(17 Southern States and District of Columbia)

State	Enrollment in public schools		No. pupils to a teacher		Average annual salary of teachers		Expenditure per pupil in A.D.A.*	
	White	Negro	White	Negro	White	Negro	White	Negro
Alabama.....	437,779	242,287	29	33	\$2,214	\$1,901	\$130.09	\$ 92.69
Arkansas.....	305,287	101,797	29	37	1,900	1,416	123.60	73.03
Delaware.....	37,835	8,220	23	28	.....	.....	.....	.....
D. C.....	50,573	45,750	25	30	3,963	3,863	289.68	220.74
Florida.....	333,454	116,382	24	27	3,056	2,643	196.42	136.71
Georgia.....	467,370	250,667	27	34	2,080	1,680	145.45	79.73
Kentucky.....	525,759	37,124	29	27	.....	.....	.....	.....
Louisiana.....	299,766	183,597	26	34	3,222	2,486	.....	.....
Maryland.....	261,417	73,601	28	30	3,600	3,575	217.41	198.76
Mississippi.....	263,643	263,797	28	40	1,884	760	122.93	32.55
Missouri.....	588,141	56,316	28	31	.....	.....	.....	.....
North Carolina.....	617,638	267,095	29	34	2,675	2,721	148.21	122.90
Oklahoma.....	403,570	37,693	24	24	.....	.....	.....	.....
South Carolina.....	272,305	221,880	27	32	2,150	1,515	154.62	79.82
Tennessee.....	552,858	106,927	29	32	.....	.....	.....	.....
Texas.....	1,152,914	201,253	26	27	3,154	2,934	.....	.....
Virginia.....	440,807	157,060	27	31	.....	.....	.....	.....
West Virginia.....	412,998	25,500	27	26	.....	.....	.....	.....
Total.....	7,424,114	2,396,946	27	32	.....	.....	.....	.....

\* A.D.A. average daily attendance. Source, this page: U. S. Office of Education.

## High-school and College Graduates, 1900 to 1953

(Public and private schools)

Year of graduation	HIGH SCHOOL			COLLEGE*		
	Men	Women	Total	Men	Women	Total
1900.....	38,075	56,808	94,883	22,173	5,237	27,410
1910.....	63,676	92,753	156,429	28,762	8,437	37,199
1920.....	123,684	187,582	311,266	31,980	16,462	48,622
1929-30.....	300,376	366,528	666,904	73,615	48,869	122,484
1940-41.....	578,718	642,757	1,221,475	106,859	79,065	185,924
1946-47.....	558,000	631,000	1,189,000	116,890	86,410	203,300
1947-48.....	562,863	627,046	1,189,909	175,456	95,563	271,019
1948-49.....	564,000	629,000	1,193,000	263,554	101,874	365,428
1949-50.....	570,700	629,000	1,199,700	328,841	103,217	432,058
1950-51†.....	562,500	619,300	1,181,800	278,240	104,306	382,546
1951-52†.....	563,400	630,300	1,193,700	225,981	104,005	329,986
1952-53†.....	608,500	680,800	1,289,300	199,793	103,256	303,049

\* Bachelors and first professional degrees. † High-school graduates are estimated.

## Public and Private Residential Schools for Exceptional Children

Type and year	States reporting*	Schools reporting	Pupils	Type and year	States reporting*	Schools reporting	Pupils
Blind:				Mentally deficient:			
1927.....	42	52	5,283	1936.....	47	130	21,889
1931.....	41	55	5,530	1940.....	47	105	21,883
1936.....	43	57	5,921	1947.....	47	140	21,562
1940.....	42	52	5,947	Epileptic:			
1947.....	43	56	5,235	1940.....	†	†	1,117
Deaf:				1947.....	10	10	1,096
1927.....	45	77	13,966	Delinquent:			
1931.....	46	84	14,890	1936.....	50	155	31,418
1936.....	47	81	15,505	1940.....	51	144	29,384
1940.....	47	81	14,815	1947.....	51	167	22,745
1947.....	47	81	13,123				

\* Includes D. C., Territory of Hawaii and Puerto Rico. † Data not available. NOTE: Total number of children (all types), 1946-47: Continental U. S., 63,137; outlying parts of the U. S., 624.

# School Enrollment, 5 to 34 Years Old

Source: U.S. Bureau of the Census.

Year and age	Male			Female			Total		
	Population*	Enrollment		Population*	Enrollment		Population*	Enrollment	
		Number	%		Number	%		Number	%
OCTOBER, 1952									
5 years.....	1,905,000	418,000	21.9	1,819,000	404,000	22.2	3,724,000	822,000	22.1
6 years.....	1,536,000	1,466,000	95.4	1,471,000	1,390,000	94.5	3,007,000	2,856,000	95.0
7 to 9 years.....	4,228,000	4,168,000	98.6	4,078,000	4,030,000	98.8	8,306,000	8,198,000	98.7
10 to 13 years.....	4,880,000	4,824,000	98.9	4,726,000	4,672,000	98.9	9,606,000	9,496,000	98.9
14 and 15 years.....	2,238,000	2,146,000	95.9	2,172,000	2,098,000	96.6	4,410,000	4,244,000	96.2
16 and 17 years.....	2,111,000	1,559,000	73.9	2,110,000	1,538,000	72.9	4,221,000	3,097,000	73.4
18 and 19 years.....	1,638,000	604,000	36.9	2,060,000	457,000	22.2	3,698,000	1,061,000	28.7
20 to 24 years.....	3,610,000	595,000	16.5	5,588,000	279,000	5.0	9,198,000	874,000	9.5
25 to 29 years.....	5,401,000	258,000	4.8	6,153,000	38,000	0.6	11,554,000	296,000	2.6
30 to 34 years.....	5,511,000	94,000	1.7	6,095,000	43,000	0.7	11,606,000	137,000	1.2
Total.....	33,058,000	16,132,000	48.8	36,272,000	14,949,000	41.2	69,330,000	31,082,000	44.8
OCTOBER, 1953									
5 years.....	1,799,000	258,000	14.3	1,721,000	265,000	15.4	3,521,000	523,000	14.9
6 years.....	1,903,000	1,777,000	93.4	1,819,000	1,738,000	95.5	3,723,000	3,515,000	94.4
7 to 9 years.....	4,311,000	4,281,000	99.3	4,147,000	4,126,000	99.5	8,457,000	8,407,000	99.4
10 to 13 years.....	5,173,000	5,124,000	99.1	5,011,000	4,994,000	99.7	10,184,000	10,118,000	99.4
14 and 15 years.....	2,297,000	2,214,000	96.4	2,220,000	2,145,000	96.6	4,516,000	4,358,000	96.5
16 and 17 years.....	2,132,000	1,630,000	76.5	2,127,000	1,550,000	72.9	4,259,000	3,180,000	74.7
18 and 19 years.....	1,705,000	642,000	37.7	2,081,000	538,000	25.9	3,785,000	1,180,000	31.2
20 to 24 years.....	3,430,000	636,000	18.5	5,440,000	346,000	6.4	8,870,000	981,000	11.1
25 to 29 years.....	5,479,000	301,000	5.5	6,003,000	33,000	0.5	11,482,000	334,000	2.9
30 to 34 years.....	5,574,000	113,000	2.0	6,242,000	87,000	1.4	11,817,000	200,000	1.7
Total.....	33,803,000	16,974,000	50.2	36,812,000	15,822,000	43.0	70,614,000	32,796,000	46.4

\* Civilian population, excluding relatively small number in institutions.

## Degrees Granted by Institutions of Higher Education, 1952-53

(Including Alaska, Hawaii and Puerto Rico)

Source: U. S. Office of Education.

Field of study	Bachelor's and first professional		Master's and second professional		Doctor's	
	Men	Women	Men	Women	Men	Women
Agriculture.....	8,674	151	1,438	32	468	5
Biology.....	4,237	1,722	365	113	147	23
Business & commerce.....	35,431	5,275	3,734	301	103	6
Chemistry.....	4,870	1,073	1,095	116	948	51
Civil engineering.....	4,389	7	565	1	40	...
Economics.....	6,545	768	521	61	214	8
Education.....	13,507	38,062	13,582	11,321	996	223
Electrical engineering.....	4,892	7	879	1	131	1
English.....	4,987	7,680	956	803	272	56
History.....	6,713	2,863	945	349	280	21
Home economics.....	28	7,489	12	596	11	36
Languages, foreign.....	1,567	2,501	451	385	149	40
Law.....	10,923	406	446	14	42	...
Mathematics.....	3,122	1,274	565	112	227	14
Mechanical engineering.....	5,959	5	667	...	84	...
Medicine, M.D. only.....	6,326	360	...	...	...	...
Music.....	2,665	3,881	1,115	579	55	6
Nursing.....	43	4,328	6	468	...	3
Pharmacy.....	3,696	404	116	11	52	5
Physical education.....	5,069	2,375	1,011	325	93	23
Political science.....	4,112	974	433	76	152	12
Psychology.....	3,330	2,616	896	265	504	79
Sociology.....	2,655	3,447	365	139	145	12
Speech & dramatic arts.....	1,697	1,823	488	392	107	14
Theology.....	4,316	184	520	68	151	1
Total.....	200,820	104,037	40,989	20,034	7,517	792

\* Includes studies not listed.

## Academic Degree Abbreviations

Source: American Council on Education.

Ae.E.	Aeronautical Engineer	G.L.	Graduate in Law
B.A.	Bachelor of Arts	G.N.	Graduate Nurse
B.Ag.	Bachelor of Agriculture	G.Ph.	Graduate in Pharmacy
B.App.Arts	Bachelor of Applied Arts	HH.D.	Doctor of Humanities
B.Arch.	Bachelor of Architecture	L.H.D.	Doctor of Humane Letters
B.B.A.	Bachelor of Business Administration	Litt.M.	Master of Letters
B.B.S.	Bachelor of Business Science	LL.B.	Bachelor of Laws
B.C.E.	Bachelor of Civil Engineering	LL.D.	Doctor of Laws
B.Ch.E.	Bachelor of Chemical Engineering	LL.M.	Master of Laws
B.D.	Bachelor of Divinity	M.A.	Master of Arts
B.Dr.Art	Bachelor of Dramatic Art	M.Aero.E.	Master of Aeronautical Engineering
B.Ed.	Bachelor of Education	M.C.E.	Master of Civil Engineering
B.E.E.	Bachelor of Electrical Engineering	M.C.S.	Master of Commercial Science
B.F.A.	Bachelor of Fine Arts	M.D.	Doctor of Medicine
B.J.	Bachelor of Journalism	M.E.	Mechanical Engineer
B.L.	Bachelor of Letters	M.Ed.	Master of Education
B.Litt.	Bachelor of Literature	Med.Sc.D.	Doctor of Medical Science
B.Med.	Bachelor of Medicine	M.Eng.	Mining Engineer
B.Mus.	Bachelor of Music or in Music	M.F.	Master of Forestry
B.N.	Bachelor of Nursing	M.F.A.	Master of Fine Arts
B.Pharm.	Bachelor of Pharmacy	M.Int.Med.	Master of Internal Medicine
B.Ph.	Bachelor of Philosophy	M.M.	Master of Music
B.S.	Bachelor of Science	M.Mech.Eng.	Master of Mechanical Engineering
B.Th.	Bachelor of Theology	M.Mus.	Master of Music
C.E.	Civil Engineer	M.N.	Master of Nursing
Ch.E.	Chemical Engineer	M.P.H.	Master of Public Health
D.C.E.	Doctor of Civil Engineering	M.R.E.	Master of Religious Education
D.C.L.	Doctor of Civil Law	M.R.P.	Master in Regional Planning
D.C.S.	Doctor of Commercial Science	M.S.	Master of Science
D.D.	Doctor of Divinity	M.Soc.Wk.	Master of Social Work
D.D.S.	Doctor of Dental Surgery	M.Surgery	Master in Surgery
D.Ed.	Doctor of Education	M.Th.	Master of Theology
D.M.L.	Doctor of Modern Languages	O.D.	Doctor of Optometry
D.M.S.	Doctor of Medical Science	Phar.D.	Doctor of Pharmacy
D.P.H.	Doctor of Public Health	Ph.B.	Bachelor of Philosophy
D.R.E.	Doctor of Religious Education	Ph.C.	Pharmaceutical Chemist
D.Sc.	Doctor of Science	Ph.D.	Doctor of Philosophy
D.V.M.	Doctor of Veterinary Medicine	Ph.G.	Graduate in Pharmacy
E.E.	Electrical Engineer	Ph.L.	Licentiate in Philosophy
E.M.	Engineer of Mines	Ph.M.	Doctor of Philosophy
E.Met.	Engineer of Metallurgy	S.Sc.D.	Doctor of Social Science
		S.T.B.	Bachelor of Sacred Theology
		S.T.D.	Doctor of Sacred Theology
		S.T.M.	Master of Sacred Theology

## Colors of Academic Degrees

Agriculture	Maize	Library Science	Lemon
Arts and Letters	White	Medicine	Green
Commerce & Accountancy	Drab	Music	Pink
Dentistry	Lilac	Oratory	Silver gray
Economics	Copper	Pharmacy	Olive green
Education	Light blue	Philosophy	Dark blue
Engineering	Orange	Physical Education	Sage green
Fine Arts, Architecture	Brown	Public Health	Salmon pink
Forestry	Russet	Science	Golden yellow
Humanities	Crimson	Theology	Scarlet
Law	Purple	Veterinary Science	Gray



# Federal Government Funds for Education, Fiscal Year 1949-50

Source: U. S. Office of Education.

Administering agency and purpose	Amount	Administering agency and purpose	Amount
Federal Security Agency.....	\$ 188,308,698	Department of the Interior.....	\$ 32,436,627
Office of Education.....	157,821,398	Education for Indians in U. S.....	19,362,756
Other.....	30,487,300	Education of natives in Alaska.....	1,929,940
Department of Agriculture.....	163,574,836	Education in the Virgin Islands.....	11,826
School lunch program.....	112,599,713	Other.....	11,132,105
Other.....	50,980,123	Department of the Treasury.....	2,046,247
Veterans Administration.....	2,868,020,239	Coast Guard Academies.....	2,014,047
Vocational rehabilitation.....	272,291,866	Other.....	32,200
Education and training.....	2,595,728,373	District of Columbia.....	1,982,045
Dept. of Commerce: Maritime Commission.....	6,755,004	Canal Zone: Public education.....	1,631,040
Federal merchant marine.....	3,288,518	General Services Administration (Veterans' Educational Facilities Program).....	827,071
Other.....	3,466,486	TOTAL.....	\$3,281,746,417
Department of Defense.....	16,159,610		
U. S. Military Academy.....	5,041,808		
U. S. Naval Academy.....	5,492,200		
Other.....	5,625,602		

## Accredited U. S. Colleges and Universities

### Spring Semester, 1954

Only schools fully accredited by at least one of the six regional accrediting associations are listed. The number of students is for undergraduate and graduate students, but does not include extension students.

M—Male; F—Female; C—Coeducational; Co—Co-ordinate

Institution, location and (date founded) <sup>1</sup>	Chief executive <sup>2</sup>	No. of students	Control <sup>3</sup>
Abilene Christian College; Abilene, Tex. (1906).....	Don H. Morris.....	1,477 C	Private
Adams State College; Alamosa, Colo. (1921).....	Fred J. Plachy.....	499 C	State
Adelphi College; Garden City, N. Y. (1896).....	Paul D. Eddy.....	2,202 C	Private
Agnes Scott College; Decatur, Ga. (1889).....	Wallace M. Alston.....	521 F	Presbyterian <sup>4</sup>
Akron, University of; Akron, Ohio (1870).....	Norman P. Auburn.....	3,632 C	City
Alabama, University of; University, Ala. (1831).....	Oliver C. Carmichael.....	5,771 C	State
Alabama A & M College; Normal, Ala. (1875) (N).....	J. F. Drake.....	1,073 C	State
Alabama College; Montevallo, Ala. (1892).....	F. Edward Lund.....	580 F	State
Alabama Polytechnic Institute; Auburn, Ala. (1872).....	Ralph B. Draughon.....	6,045 C	State
Alabama State College for Negroes; Montgomery, Ala. (N).....	H. C. Trenholm.....	2,379 C <sup>45</sup>	State
Alabama State Teachers College; Florence, Ala. (1872).....	E. B. Norton.....	829 C	State
Alabama State Teachers College; Jacksonville, Ala. (1883).....	Houston Cole.....	1,427 C	State
Alabama State Teachers College; Livingston, Ala. (1883).....	W. W. Hill.....	328 C	State
Alabama State Teachers College; Troy, Ala. (1887).....	C. B. Smith.....	775 C	State
Alaska, University of College, Alaska (1917).....	Ernest N. Patty.....	333 C	Territory
Albany State College; Albany, Ga. (1903) (N).....	Aaron Brown.....	455 C	State
Albertus Magnus College; New Haven, Conn. (1925).....	Sister Mary Lucia.....	250 F	Catholic <sup>4</sup>
Albion College; Albion, Mich. (1835).....	William W. Whitehouse.....	1,027 C	Methodist <sup>4</sup>
Albright College; Reading, Pa. (1856).....	Harry V. Masters.....	495 C	Evan. Un. Breth.
Alcorn A & M College; Alcorn, Miss. (1871) (N).....	J. R. Otis.....	559 C	State
Alfred University; Alfred, N. Y. (1836).....	M. Ellis Drake.....	858 C	Private
Allegheny College; Meadville, Pa. (1815).....	Louis T. Benezet.....	912 C	Methodist <sup>4</sup>
Alliance College; Cambridge Springs, Pa. (1912).....	A. P. Coleman.....	164 C	Private
Alma College; Alma, Mich. (1886).....	John S. Harker.....	475 C	Presbyterian
Alverno College; Milwaukee, Wis. (1890).....	Sister M. Augustine.....	345 F	Catholic <sup>4</sup>
American International College; Springfield, Mass. (1885).....	John F. Hines.....	1,015 C	Private
American University; Washington, D. C. (1893).....	Hurst R. Anderson.....	1,754 C	Methodist
Amherst College; Amherst, Mass. (1821).....	Charles W. Cole.....	1,050 M	Private
Anderson College & Theological Seminary; Anderson, Ind. (1917).....	John A. Morrison.....	826 C	Church of God
Antioch College; Yellow Springs, Ohio (1853).....	Douglas McGregor.....	938 C	Private
Appalachian State Teachers College; Boone, N. C. (1903).....	B. B. Dougherty.....	1,200 C	State
Aquinas College; Grand Rapids, Mich. (1923).....	Msr. A. F. Bukowski.....	530 C	Catholic
Arizona, University of; Tucson, Ariz. (1885).....	Richard A. Harvill.....	4,958 C	State
Arizona State College; Flagstaff, Ariz. (1899).....	Lacey A. Eastburn.....	557 C	State
Arizona State College; Tempe, Ariz. (1885).....	Grady Gammage.....	3,851 C	State

Institution, location and (date founded) <sup>1</sup>	Chief executive <sup>2</sup>	No. of students	Control <sup>3</sup>
Arkansas, University of; Fayetteville, Ark. (1871).....	John T. Caldwell.....	4,551 C	State
Arkansas A & M College; College Heights, Ark. (1909).....	Horace E. Thompson.....	593 C	State
Arkansas Polytechnic College; Russellville, Ark. (1909).....	J. W. Hull.....	854 C	State
Arkansas State A & M & Normal College; Pine Bluff, Ark. (1873)(N).....	Lawrence A. Davis.....	998 C	State
Arkansas State College; Jonesboro, Ark. (1912) <sup>6</sup> .....	Carl. R. Reng.....	900 C	State
Arkansas State Teachers College; Conway, Ark. (1907).....	Silas D. Snow.....	1,034 C	State
Asbury College; Wilmore, Ky. (1890).....	Z. T. Johnson.....	805 C	Private
Ashland College; Ashland, Ohio (1878).....	Gleen L. Clayton.....	306 C	Brethren
Assumption College; Worcester, Mass. (1904).....	V. Rev. A. H. Desautels.....	150 M <sup>6</sup>	Catholic <sup>4</sup>
Atlanta University; Atlanta, Ga. (1865) (N).....	Rufus E. Clement.....	654 C	Private
Atlantic Union College; South Lancaster, Mass. (1882).....	L. M. Stump.....	358 C	7th Day Adven.
Augustana College; Rock Island, Ill. (1860).....	Conrad Bergendoff.....	893 C	Lutheran
Augustana College; Sioux Falls, S. Dak. (1860).....	Lawrence M. Stavig.....	612 C	Lutheran
Aurora College; Aurora, Ill. (1893).....	Theodore P. Stephens.....	400 C	Adven. Christ.
Austin College; Sherman, Tex. (1849).....	John D. Moseley.....	464 C	Presbyterian
Austin Peay State College; Clarksville, Tenn. (1927).....	Halbert Harvill.....	1,293 C	State
Babson Institute; Babson Park, Mass. (1919).....	Edward B. Hinckley.....	400 M	Private
Baker University; Baldwin, Kans. (1858).....	Nelson P. Horn.....	414 C	Methodist
Baldwin-Wallace College; Berea, Ohio (1845).....	John L. Knight.....	1,277 C	Methodist
Ball State Teachers College; Muncie, Ind. (1918).....	John R. Emens.....	2,862 C	State
Barat College of the Sacred Heart; Lake Forest, Ill. (1858).....	Mother Reilly.....	301 F	Catholic <sup>4</sup>
Barber-Scotia College; Concord, N. C. (1867) (N).....	L. S. Cozart.....	215 F	Presbyterian
Bard College; Annandale-on-Hudson, N. Y. (1860).....	James H. Case, Jr.....	204 C	Private
Barnard College; New York, N. Y. (1889) <sup>7</sup> .....	Millicent C. McIntosh.....	1,130 F	Private
Barry College; Miami, Fla. (1940).....	Rev. Mother M. Gerald.....	384 F <sup>8</sup>	Catholic <sup>4</sup>
Bates College; Lewiston, Maine (1864).....	Charles F. Phillips.....	775 C	Private <sup>6</sup>
Baylor University; Waco, Tex. (1845).....	William R. White.....	4,140 C	Baptist
Beaver College; Jenkintown, Pa. (1853).....	Raymon Kistler.....	495 F	Presbyterian <sup>4</sup>
Belhaven College; Jackson, Miss. (1894).....	G. T. Gillespie.....	150 F <sup>8</sup>	Presbyterian
Bellarmino College; Plattsburgh, N. Y. (1952).....	Rev. T. E. Henneberry.....	128 M	Catholic
Beloit College; Beloit, Wis. (1846).....	Miller Upton.....	821 C	Private
Bennett College; Greensboro, N. C. (1873) (N).....	David D. Jones.....	438 F	Methodist <sup>4</sup>
Bennington College; Bennington, Vt. (1925).....	Frederick Burkhardt.....	320 F <sup>8</sup>	Private
Berea College; Berea, Ky. (1855).....	Francis S. Hutchins.....	1,046 C	Private
Bethany College; Bethany, W. Va. (1840).....	Perry E. Gresham.....	446 C	Disc. of Christ <sup>4</sup>
Bethany College; Lindsborg, Kans. (1881).....	Robert A. L. Mortvedt.....	300 C	Lutheran
Bethel College; McKenzie, Tenn. (1842).....	Roy N. Baker.....	450 C	Presbyterian
Bethel College; North Newton, Kans. (1887).....	D. C. Wedel.....	325 C	Mennonite
Bethune-Cookman College; Daytona Beach, Fla. (1904) (N).....	Richard V. Moore.....	744 C	Methodist
Birmingham-Southern College; Birmingham, Ala. (1856).....	George R. Stuart.....	719 C	Methodist
Bishop College; Marshall, Tex. (1881) (N).....	Earl Oldham.....	315 C <sup>45</sup>	Baptist
Black Hills Teachers College; Spearfish, S. Dak. (1883).....	Russell E. Jonas.....	312 C	State
Blackburn University; Carlinville, Ill. (1857).....	Robert P. Ludlum.....	319 C	Presb. <sup>4</sup>
Blue Mountain College; Blue Mountain, Miss. (1873).....	Lawrence T. Lowrey.....	246 F <sup>8</sup>	Baptist
Bluefield State College; Bluefield, W. Va. (1895) (N).....	S. J. Wright.....	302 C	State
Bluffton College; Bluffton, Ohio (1900).....	Lloyd L. Ramseyer.....	228 C	Mennonite <sup>4</sup>
Boston College; Chestnut Hill, Mass. (1863).....	V. Rev. J. R. N. Maxwell.....	7,410 C	Catholic <sup>4</sup>
Boston University; Boston, Mass. (1839).....	Harold C. Case.....	9,755 C	Methodist <sup>4</sup>
Bowdoin College; Brunswick, Maine (1794).....	James S. Coles.....	742 M	Private <sup>10</sup>
Bowling Green State University; Bowling Green, Ohio (1910).....	Ralph W. McDonald.....	3,120 C	State
Bradford Durfee Technical Institute; Fall River, Mass. (1904).....	Leslie B. Coombs.....	229 C	State
Bradley University; Peoria, Ill. (1897).....	Harold P. Rodes.....	2,117 C	Private
Brandeis University; Waltham, Mass. (1948).....	Abraham L. Sachar.....	860 C	Private
Brenau College; Gainesville, Ga. (1876).....	Josiah Crupud.....	266 F	Private
Briar Cliff College; Sioux City, Iowa (1930).....	Sister Jean Marie.....	370 F	Catholic
Bridgeport, University of; Bridgeport, Conn. (1927) <sup>11</sup> .....	James H. Halsey.....	2,531 C	Private
Bridgewater College; Bridgewater, Va. (1880).....	Warren D. Bowman.....	432 C	Brethren
Brigham Young University; Provo, Utah (1875).....	Ernest L. Wilkinson.....	6,500 C	Latter-day Saints
Brooklyn, Polytechnic Institute of; Brooklyn, N. Y. (1854).....	H. S. Rogers.....	5,504 M	Private
Brooklyn College. See New York, College of the City of.....			
Brown University; Providence, R. I. (1764).....	Henry M. Wriston.....	3,121 Co <sup>12</sup>	Private
Bryn Mawr College; Bryn Mawr, Pa. (1885).....	Katharine E. McBride.....	761 F <sup>8</sup>	Private
Bucknell University; Lewisburg, Pa. (1846).....	(Vacant).....	1,821 C	Baptist <sup>4</sup>
Buena Vista College; Storm Lake, Iowa (1891).....	W. D. Wesselink <sup>13</sup> .....	381 C	Presbyterian
Buffalo, University of; Buffalo, N. Y. (1846).....	Clifford C. Furnas <sup>14</sup> .....	8,295 C	Private
Butler University; Indianapolis, Ind. (1855).....	M. O. Ross.....	3,676 C	Disc. of Christ <sup>4</sup>
Caldwell College for Women; Caldwell, N. J. (1939).....	Mother Mary Joseph.....	203 F	Catholic <sup>4</sup>
California, University of; Berkeley, Calif. (1868).....	Robert G. Sproul.....	32,114 C	State

Institution, location and (date founded) <sup>1</sup>	Chief executive <sup>2</sup>	No. of students	Control <sup>3</sup>
California Institute of Technology; Pasadena, Calif. (1891).....	Lee A. Du Bridge.....	937 M	Private
California State Polytechnic College; San Luis Obispo, Calif. (1901)	Julian A. McPhee.....	2,523 M	State
Calvin College; Grand Rapids, Mich. (1876).....	William Spoelhof.....	1,234 C	Christian Ref.
Canisius College; Buffalo, N. Y. (1870).....	V. Rev. P. E. Dobson.....	999 M <sup>8</sup>	Catholic <sup>4</sup>
Capital University; Columbus, Ohio (1850).....	Harold L. Yochum.....	1,126 C	Lutheran
Cardinal Stritch College; Milwaukee, Wis. (1934).....	Mother M. Bartholomew.....	137 F	Catholic <sup>4</sup>
Carleton College; Northfield, Minn. (1866).....	Laurence M. Gould.....	834 C	(15)
Carnegie Institute of Technology; Pittsburgh Pa. (1900).....	John C. Warner.....	2,844 C	Private
Carroll College; Helena, Mont. (1910).....	V. Rev. R. V. Kavanagh.....	384 C	Catholic
Carroll College; Waukesha, Wis. (1846).....	Robert D. Steele.....	582 C	Presbyterian <sup>4</sup>
Carson-Newman College; Jefferson City, Tenn. (1851).....	Harley Fite.....	916 C	Baptist
Carthage College; Carthage, Ill. (1870).....	Harold H. Lentz.....	425 C	Lutheran
Cascade College; Portland, Oreg. (1918).....	C. J. Pike.....	215 C	Private
Case Institute of Technology; Cleveland, Ohio (1880).....	T. Keith Glennan.....	1,675 M	Private
Catawba College; Salisbury, N. C. (1851).....	A. R. Keppel.....	500 C	Evan. & Ref. <sup>4</sup>
Catholic University of America; Washington, D. C. (1887).....	Most Rev. B. J. McEntegart <sup>18</sup>	3,117 C	Catholic
Cedar Crest College; Allentown, Pa. (1867).....	Dale H. Moore.....	402 F	Evan. & Ref. <sup>4</sup>
Centenary College of Louisiana; Shreveport, La. (1825).....	Joe J. Mickle.....	902 C	Methodist
Central College; Fayette, Mo. (1854).....	Ralph L. Woodward.....	456 C	Methodist
Central College; Pella, Iowa (1853).....	G. T. Vander Lugt.....	299 C	Reformed
Central Michigan College of Education; Mt. Pleasant, Mich. (1892)	Charles L. Anspach.....	2,167 C	State
Central Missouri State College; Warrensburg, Mo. (1871).....	G. W. Diemer.....	1,287 C	State
Central State College; Edmond, Okla. (1890).....	W. Max Chambers.....	1,025 C	State
Central State College; Wilberforce, Ohio (1887).....	Charles H. Wesley.....	858 C	State
Central Washington College of Education; Ellensburg, Wash. (1891)	Robert E. McConnell.....	1,246 C	State
Centre College of Kentucky; Danville, Ky. (1819).....	Walter A. Groves.....	394 Co	Presbyterian <sup>4</sup>
Charleston, College of; Charleston, S. C. (1770).....	George D. Grice.....	280 C	Private
Chattanooga, University of; Chattanooga, Tenn. (1886).....	David A. Lockmiller.....	1,036 C	Methodist <sup>4</sup>
Chestnut Hill College; Philadelphia, Pa. (1871).....	Sister M. Kostka.....	409 F	Catholic <sup>4</sup>
Chicago, School of the Art Institute of; Chicago, Ill. (1879).....	Hubert Roth <sup>17</sup> .....	789 C	Private
Chicago, University of; Chicago, Ill. (1890).....	Lawrence A. Kimpton <sup>14</sup> .....	4,154 C	Baptist <sup>4</sup>
Chicago Teachers College; Chicago, Ill. (1869).....	Raymond M. Cook <sup>17</sup> .....	1,627 C	City
Chico State College; Chico, Calif. (1887).....	Glenn Kendall.....	1,515 C	State
Cincinnati, University of; Cincinnati, Ohio (1819).....	Raymond Walters.....	6,085 C	City
Citadel, The; Military College of S. C.; Charleston, S. C. (1842).....	Gen. Mark W. Clark.....	1,293 M	State
City College. See New York, College of the City of.....	Frederick Hard <sup>18</sup> .....	95 C	Private
Claremont College; Claremont, Calif. (1925).....	George C. S. Benson.....	320 M	Private
Claremont Men's College; Claremont, Calif. (1947).....	James P. Brawley.....	634 C	Methodist
Clark College; Atlanta, Ga. (1869) (N).....	Howard B. Jefferson.....	706 Co	Private
Clark University; Worcester, Mass. (1887).....	Sister M. A. Leone.....	461 F	Catholic <sup>4</sup>
Clarke College; Dubuque, Iowa (1843).....	William G. Van Note.....	929 M	Private
Clarkson College of Technology; Potsdam, N. Y. (1896).....	Robert F. Poole.....	2,446 M <sup>8</sup>	State
Clemson Agricultural College; Clemson, S. C. (1889).....	Howell H. Brooks.....	725 C	Presbyterian <sup>4</sup>
Coe College; Cedar Rapids, Iowa (1851).....	Joseph C. Robert.....	210 F <sup>8</sup>	Private
Coker College for Women; Hartsville, S. C. (1908).....	Julius S. Bixler.....	1,016 C	Baptist <sup>4</sup>
Colby College; Waterville, Maine (1813).....	Everett Case.....	1,314 M	Private
Colgate University; Hamilton, N. Y. (1819).....	Ward Darley.....	7,099 C	State
Colorado, University of; Boulder, Colo. (1876).....	William E. Morgan.....	3,168 C	State
Colorado A & M College; Fort Collins, Colo. (1870).....	William H. Gill.....	912 C	Private
Colorado College; Colorado Springs, Colo. (1874).....	John W. Vanderwilt.....	849 M <sup>8</sup>	State
Colorado School of Mines; Golden, Colo. (1869).....	William R. Ross.....	2,083 C	State
Colorado State College of Education; Greeley, Colo. (1890).....	R. Wright Spears.....	378 F <sup>8</sup>	Methodist
Columbia College; Columbia, S. C. (1854).....	Grayson Kirk.....	19,240 C	Private
Columbia University; New York, N. Y. (1754).....	Virgil H. Stewart.....	680 C	State
Concord College; Athens, W. Va. (1872).....	Joseph L. Knutson.....	180 C	Lutheran
Concordia College; Moorhead, Minn. (1891).....	Alfred Schmieding <sup>13</sup> .....	638 C	Lutheran
Concordia Teachers College; River Forest, Ill. (1864).....	L. G. Bickel <sup>13</sup> .....	300 C	Lutheran
Concordia Teachers College; Seward, Nebr. (1894).....	A. N. Jorgensen.....	8,942 C	State
Connecticut, University of; Storrs, Conn. (1881).....	Rosemary Park.....	845 F	Private
Connecticut College; New London, Conn. (1911).....	Ruth A. Haas.....	380 C	State
Connecticut State Teachers College; Danbury, Conn. (1904).....	Herbert D. Welte.....	944 C	State
Connecticut State Teachers College; New Britain, Conn. (1849).....	Hilton C. Buley.....	1,110 C	State
Connecticut State Teachers College; New Haven, Conn. (1893).....	J. Eugene Smith.....	208 C	State
Connecticut State Teachers College; Willimantic, Conn. (1889).....	E. M. Gwathmey.....	337 F <sup>8</sup>	Private
Converse College; Spartanburg, S. C. (1889).....	Edwin S. Burdell.....	1,195 C	Private
Copper Union; New York, N. Y. (1859).....	Russell D. Cole.....	593 C	Methodist <sup>4</sup>
Cornell College; Mount Vernon, Iowa (1853).....	Deane W. Malott.....	9,692 C	Private
Cornell University; Ithaca, N. Y. (1865).....	V. Rev. Carl M. Reinert.....	2,432 C	Catholic <sup>4</sup>
Creighton University; Omaha, Nebr. (1878).....	L. E. Ziegler.....	269 C	Disc. of Christ <sup>4</sup>
Culver-Stockton College; Canton, Mo. (1853).....			



Institution, location and (date founded) <sup>1</sup>	Chief executive <sup>2</sup>	No. of students	Control <sup>3</sup>
Dakota Wesleyan University; Mitchell, S. Dak. (1885).....	Matthew D. Smith.....	355 C	Methodist <sup>4</sup>
Dartmouth College; Hanover, N. H. (1769).....	John S. Dickey.....	2,786 M	Private
Davidson College; Davidson, N. C. (1837).....	John R. Cunningham.....	800 M	Presbyterian
Davis & Elkins College; Elkins, W. Va. (1903).....	David K. Allen.....	466 C	Presbyterian
Dayton, University of; Dayton, Ohio (1849).....	Rev. Andrew L. Seebold.....	2,133 C	Catholic
Delaware, University of; Newark, Del. (1833).....	John A. Perkins.....	2,621 C	State
Delaware State College; Dover, Del. (1891) (N).....	Jerome H. Holland.....	150 C	State
Delta State Teachers College; Cleveland, Miss. (1924).....	William M. Kethley.....	393 C	State
Denison University; Granville, Ohio (1831).....	A. Blair Knapp.....	1,203 C	Baptist <sup>4</sup>
Denver, University of; Denver, Colo. (1864).....	Chester M. Alter <sup>14</sup> .....	5,121 C	Methodist <sup>4</sup>
De Paul University; Chicago, Ill. (1898).....	V. Rev. C. J. O'Malley.....	5,703 C	Catholic
DePauw University; Greencastle, Ind. (1837).....	Russell J. Humbert.....	1,657 C	Methodist <sup>4</sup>
Detroit, University of; Detroit, Mich. (1877) <sup>5</sup> .....	Rev. Celestin J. Steiner.....	4,569 C	Catholic
Dickinson College; Carlisle, Pa. (1773).....	William W. Edel.....	832 C	Methodist <sup>4</sup>
Dillard University; New Orleans, La. (1930) (N).....	Albert W. Dent.....	624 C	Cg.-Chr. & Meth. <sup>4</sup>
Doane College; Crete, Nebr. (1872).....	David L. Crawford.....	253 C	Congregational
Dominican College of San Rafael; San Rafael, Calif. (1890) <sup>6</sup> .....	Sister M. Patrick.....	269 F	Catholic <sup>4</sup>
Drake University; Des Moines, Iowa (1881).....	Henry G. Harmon.....	3,479 C	Private
Drew University; Madison, N. J. (1867).....	Fred G. Holloway.....	760 C	Methodist <sup>4</sup>
Drexel Institute of Technology; Philadelphia, Pa. (1891).....	James Creese.....	6,378 C	Private
Drury College; Springfield, Mo. (1873).....	J. F. Findlay.....	627 C	Congregational <sup>4</sup>
Dubuque, University of; Dubuque, Iowa (1852).....	Gaylord Couchman.....	464 C	Presbyterian <sup>4</sup>
Duchesne College; Omaha, Nebr. (1881) <sup>6</sup> .....	Mother Mary M. Downey.....	246 F	Catholic <sup>4</sup>
Duke University; Durham, N. C. (1838).....	Arthur H. Edens.....	4,587 C	Private
Dunbarton College of Holy Cross; Washington, D. C. (1935).....	Sister M. M. Dolores.....	160 F	Catholic <sup>4</sup>
Duquesne University; Pittsburgh, Pa. (1878).....	V. Rev. V. F. Gallagher.....	3,685 C	Catholic <sup>4</sup>
D'Youville College; Buffalo, N. Y. (1908).....	Sister Margaret.....	458 F	Catholic <sup>4</sup>
Earlham College; Richmond, Ind. (1847).....	Thomas E. Jones.....	614 C	Quaker
East Carolina College; Greenville, N. C. (1907) <sup>10</sup> .....	John D. Messick.....	2,095 C	State
East Central State College; Ada, Okla. (1909).....	Charles F. Spencer.....	1,052 C	State
East Tennessee State College; Johnson City, Tenn. (1911).....	Burgin E. Dossett.....	2,369 C	State
East Texas State Teachers College; Commerce, Tex. (1917).....	James G. Goe.....	1,814 C	State
Eastern Illinois State College; Charleston, Ill. (1899).....	Robert G. Buzzard.....	1,173 C	State
Eastern Kentucky State College; Richmond, Ky. (1906).....	W. F. O'Donnell.....	1,488 C	State
Eastern Montana College of Education; Billings, Mont. (1925).....	A. G. Peterson.....	509 C	State
Eastern Nazarene College; Wollaston Park, Mass. (1918).....	Edward S. Mann.....	454 C	Nazarene
Eastern New Mexico University; Portales, N. Mex. (1934).....	Floyd D. Golden.....	757 C	State
Eastern Oregon College of Education; La Grande, Oreg. (1929).....	Frank B. Bennett.....	425 C	State
Eastern Washington College of Education; Cheney, Wash. (1890).....	Don S. Patterson.....	866 C	State
Elizabethtown College; Elizabethtown, Pa. (1899).....	A. C. Baugher.....	338 C	Brethren
Elmhurst College; Elmhurst, Ill. (1871).....	H. W. Dinkmeyer.....	630 C	Evan. & Ref.
Elmira College; Elmira, N. Y. (1855).....	Lewis Eldred.....	247 F	Private
Elon College; Elon College, N. C. (1889).....	Leon E. Smith.....	707 C	Cong. Christian
Emerson College; Boston, Mass. (1880).....	S. Justus McKinley.....	233 C	Private
Emmanuel College; Boston, Mass. (1919).....	Sister Alice Gertrude.....	576 F	Catholic <sup>4</sup>
Emmanuel Missionary College; Berrien Springs, Mich. (1874).....	Percy W. Christian.....	785 C	7th Day Adven.
Emory & Henry College; Emory, Va. (1936).....	Rev. Foye G. Gibson.....	490 C	Methodist
Emory University; Atlanta, Ga. (1836).....	Goodrich C. White.....	3,299 C	Methodist <sup>4</sup>
Emporia, College of; Emporia, Kans. (1882).....	Luther E. Sharpe.....	243 C	Presbyterian <sup>4</sup>
Erskine College; Due West, S. C. (1839).....	Robert C. Grier.....	290 C	Presbyterian
Evansville College; Evansville, Ind. (1854).....	Lincoln B. Hale.....	956 C	Methodist <sup>4</sup>
Fairleigh Dickinson College; Rutherford, N. J. (1941).....	Peter Sammartino.....	1,375 C	Private <sup>20</sup>
Fairmont State College; Fairmont, W. Va. (1867).....	John W. Pence.....	922 C	State
Fenn College; Cleveland, Ohio (1881).....	G. Brooks Earnest.....	3,431 C	Private
Ferris Institute; Big Rapids, Mich. (1884).....	Victor F. Spatheff.....	780 C	State
Fisk University; Nashville, Tenn. (1865) (N).....	Charles S. Johnson.....	651 C	Cong. Christian <sup>4</sup>
Flora Macdonald College; Red Springs, N. C. (1896).....	Marshall S. Woodson.....	275 F <sup>3</sup>	Presbyterian
Florida, University of; Gainesville, Fla. (1853).....	John S. Allen <sup>13</sup> .....	8,653 C	State
Florida A & M University; Tallahassee, Fla. (1887) (N).....	George W. Gore, Jr.....	2,050 C	State
Florida Nor. & Ind. Memorial College; St. Augustine, Fla. (1892)(N).....	R. W. Puryear.....	216 C	Baptist <sup>4</sup>
Florida Southern College; Lakeland, Fla. (1885) <sup>6</sup> .....	Ludd M. Spivey.....	1,936 C	Methodist
Florida State University; Tallahassee, Fla. (1857).....	Doak S. Campbell.....	5,738 C	State
Fontbonne College; St. Louis, Mo. (1923).....	Mother M. Marcella.....	306 F	Private
Fordham University; New York, N. Y. (1841).....	Rev. Laurence J. McGinley.....	8,587 C <sup>21</sup>	Catholic
Fort Hays Kansas State College; Hays, Kans. (1901).....	M. C. Cunningham.....	1,300 C	State
Fort Valley State College; Fort Valley, Ga. (1895) (N).....	C. V. Troup.....	670 C	State
Franklin & Marshall College; Lancaster, Pa. (1787).....	Theodore A. Distler.....	1,107 M <sup>6</sup>	Evan. & Ref. <sup>4</sup>
Franklin College; Franklin, Ind. (1834).....	Harold W. Richardson.....	415 C	Baptist <sup>4</sup>

Institution, location and (date founded) <sup>1</sup>	Chief executive <sup>2</sup>	No. of students	Control <sup>3</sup>
Fresno State College; Fresno, Calif. (1911) <sup>11</sup>	Arnold E. Joyal	2,932 C	State
Friends University; Wichita, Kans. (1898)	Lloyd S. Cressman	460 C	Quaker
Furman University; Greenville, S. C. (1826)	John L. Plyler	1,237 Co	Baptist <sup>4</sup>
Gannon College; Erie, Pa. (1944)	Joseph Wehrle	1,000 M	Catholic <sup>4</sup>
Gen. Assembly's Trn'g Sch. for Lay Workers; Richmond, Va. (1914)	Rev. C. E. S. Kraemer	100 C	Presbyterian
General Beadle State Teachers College; Madison, S. Dak. (1883)	V. A. Lowry	204 C	State
Geneva College; Beaver Falls, Pa. (1848)	Charles M. Lee	588 C	Presbyterian
George Peabody College for Teachers; Nashville, Tenn. (1875)	Henry H. Hill	1,313 C	Private
George Pepperdine College; Los Angeles, Calif. (1937)	Hugh M. Tiner	860 C	Ch. of Christ <sup>4</sup>
George Washington University; Washington, D. C. (1821)	Cloyd H. Marvin	8,552 C	Private
George Williams College; Chicago, Ill. (1890)	John R. McCurdy	198 C	Private
Georgetown College; Georgetown, Ky. (1829)	R. D. Judd <sup>12</sup>	666 C	Baptist
Georgetown University; Washington, D. C. (1789)	V. Rev. Edward B. Bunn	5,056 C	Catholic
Georgia, Medical College of; Augusta, Ga. (1828)	Edgar R. Pund	303 C	State
Georgia, University of; Athens, Ga. (1785)	O. C. Aderhold	4,095 C	State
Georgia Institute of Technology; Atlanta, Ga. (1885)	Blake R. Van Leer	3,935 C	State
Georgia State College for Women; Milledgeville, Ga. (1889)	Henry K. Stanford	540 F	State
Georgia Teachers College; Collegeboro, Ga. (1924)	Zach S. Henderson	508 C	State
Georgian Court College; Lakewood, N. J. (1908)	Mother Marie A. Callahan	250 F	Catholic <sup>4</sup>
Gettysburg College; Gettysburg, Pa. (1832)	Walter C. Langsam	1,131 C	Lutheran <sup>4</sup>
Glenville State College; Glenville, W. Va. (1872)	Harry B. Heflin	443 C	State
Golden Gate College; San Francisco, Calif. (1901)	Nagel T. Miner	1,917 C	Private
Gonzaga University; Spokane, Wash. (1887)	V. Rev. F. E. Corkery	1,282 C	Catholic
Good Counsel College; White Plains, N. Y. (1923)	Mother Mary Dolores	238 F	Catholic <sup>4</sup>
Goshen College; Goshen, Ind. (1903) <sup>6</sup>	Ernest E. Miller	586 C	Mennonite
Goucher College; Baltimore, Md. (1885)	Otto F. Kraushaar	602 F	Private
Grambling College; Grambling, La. (1928) (N)	R. W. E. Jones	1,815 C	State
Great Falls, College of; Great Falls, Mont. (1932)	Msr. James J. Donovan	426 C	Catholic
Greensboro College; Greensboro, N. C. (1838)	Harold H. Hutson	383 F <sup>8</sup>	Methodist
Greenville College; Greenville, Ill. (1892)	H. J. Long	450 C	Methodist
Grinnell College; Grinnell, Iowa (1846)	Samuel N. Stevens	832 C	Cong. & Epis. <sup>4</sup>
Grove City College; Grove City, Pa. (1876)	Weir C. Kettler	1,001 C	Presbyterian <sup>4</sup>
Guilford College; Guilford College, N. C. (1837)	Clyde A. Milner	571 C	Quaker <sup>4</sup>
Gustavus Adolphus College; St. Peter, Minn. (1862)	Edgar M. Carlson	826 C	Lutheran
Hamilton College; Clinton, N. Y. (1812)	Robert W. McEwen	570 M	Private
Hamline University; St. Paul, Minn. (1854)	Paul H. Giddens	1,183 C	Methodist <sup>4</sup>
Hampden-Sydney College; Hampden-Sydney, Va. (1775)	Edgar G. Gamman	311 M	Presbyterian
Hampton Institute; Hampton, Va. (1868) (N)	Alonzo G. Moron	1,207 C	Private
Hanover College; Hanover, Ind. (1827)	Albert G. Parker, Jr.	564 C	Presbyterian <sup>4</sup>
Harpur College. See New York, State University of.			
Harris Teachers College; St. Louis, Mo. (1857)	Charles A. Naylor	539 C	City
Hartwick College; Oneonta, N. Y. (1928)	Miller A. F. Ritchie	378 C	Lutheran
Harvard University; Cambridge, Mass. (1636)	Nathan M. Pusey	10,062 M <sup>6</sup>	Private
Hastings College; Hastings, Nebr. (1882)	Dale D. Welch	523 C	Presbyterian <sup>4</sup>
Haverford College; Haverford, Pa. (1833)	Gilbert F. White	463 M <sup>6</sup>	Quaker <sup>4</sup>
Hawaii, University of; Honolulu, Hawaii (1907)	Gregg M. Sinclair	4,378 C	Territory
Heidelberg College; Tiffin, Ohio (1850)	Terry Wickham	582 C	Evan. & Ref.
Henderson State Teachers College; Arkadelphia, Ark. (1929)	Dean D. McBrien	1,107 C	State
Hendrix College; Conway, Ark. (1884)	Matt L. Ellis	453 C	Methodist
High Point College; High Point, N. C. (1924)	Dennis H. Cooke	700 C	Methodist <sup>4</sup>
Hillsdale College; Hillsdale, Mich. (1844)	J. Donald Phillips	512 C	Baptist <sup>4</sup>
Hiram College; Hiram, Ohio (1850)	Paul H. Fall	459 C	Disc. of Christ <sup>4</sup>
Hobart College. See Seneca, Colleges of the			
Hofstra College; Hempstead, N. Y. (1935)	John C. Adams	2,193 C	Private
Hollins College; Hollins College, Va. (1842)	John R. Everett	465 F	Private
Holy Cross, College of the; Worcester, Mass. (1843)	V. Rev. John A. O'Brien	1,790 M	Catholic
Holy Names, College of the; Oakland, Calif. (1880)	Sister M. Francis Raphael	352 F	Catholic <sup>4</sup>
Holy Names College; Spokane, Wash. (1912)	Sister M. Theresa	307 F	Catholic <sup>4</sup>
Hooi College; Frederick, Md. (1893)	Andrew G. Truxal	450 F	Evan. & Ref. <sup>4</sup>
Hope College; Holland, Mich. (1851)	Irwin J. Lubbers	786 C	Reformed
Houghton College; Houghton, N. Y. (1883)	Stephen W. Paine	567 C	Methodist
Howard College; Birmingham, Ala. (1842)	Harwell G. Davis	1,166 C	Baptist
Howard Payne College; Brownwood, Tex. (1889)	Thomas H. Taylor	1,129 C	Baptist
Howard University; Washington, D. C. (1867) (N)	Mordecai W. Johnson	3,333 C	Private
Humboldt State College; Arcata, Calif. (1913)	Cornelius H. Siemens	834 C	State
Hunter College. See New York, College of the City of.			
Huntingdon College; Montgomery, Ala. (1854)	Hubert Searcy	612 C	Methodist <sup>4</sup>
Huron College; Huron, S. Dak. (1883)	Daniel E. Kerr	211 C	Presbyterian
Huston-Tillotson College; Austin, Tex. (1952) (N)	Dr. Matthew S. Davage	703 C	Cong. & Meth.

Institution, location and (date founded) <sup>1</sup>	Chief executive <sup>2</sup>	No. of students	Control <sup>3</sup>
Idaho, College of; Caldwell, Idaho (1891).....	Margaret Boone <sup>12</sup> .....	414 C	Presbyterian <sup>4</sup>
Idaho, University of; Moscow, Idaho (1889).....	J. E. Buchanan.....	2,739 C	State
Idaho State College; Pocatello, Idaho (1901).....	Carl W. McIntosh.....	1,460 C	State
Illinois, University of; Urbana, Ill. (1867).....	Lloyd Morey.....	16,834 C	State
Illinois College; Jacksonville, Ill. (1829).....	William K. Selden.....	227 C	Cong. & Presb. <sup>4</sup>
Illinois Institute of Technology; Chicago, Ill. (1892).....	John T. Rettaliata.....	5,833 C	Private
Illinois State Normal University; Normal, Ill. (1857).....	R. W. Fairchild.....	2,104 C	State
Illinois Wesleyan University; Bloomington, Ill. (1850).....	Merrill J. Holmes.....	684 C	Methodist <sup>4</sup>
Immaculate College; Immaculate, Pa. (1920).....	Msr. Vincent L. Burns.....	362 F	Catholic <sup>4</sup>
Immaculate Heart College; Los Angeles, Calif. (1916).....	Sister Mary Thecla.....	714 F <sup>8</sup>	Catholic <sup>4</sup>
Incarinate Word College; San Antonio, Tex. (1881).....	Sister M. Columkille.....	627 F <sup>8</sup>	Catholic <sup>4</sup>
Indiana Central College; Indianapolis, Ind. (1902).....	I. Lynd Esch.....	373 C	Evan. Un. Breth.
Indiana State Teachers College; Terre Haute, Ind. (1870).....	Raleigh W. Holmstedt.....	1,728 C	State
Indiana University; Bloomington, Ind. (1820).....	H. B. Wells.....	11,628 C	State
Iona College; New Rochelle, N. Y. (1940).....	Brother W. H. Barnes.....	1,457 M	Catholic <sup>4</sup>
Iowa, State University of; Iowa City, Iowa (1847).....	Virgil M. Hancher.....	7,511 C	State
Iowa State College of A & M Arts; Ames, Iowa (1858).....	James H. Hilton.....	7,426 C	State
Iowa State Teachers College; Cedar Falls, Iowa (1876).....	J. W. Maucker.....	2,099 C	State
Iowa Wesleyan College; Mount Pleasant, Iowa (1842).....	J. Raymond Chadwick.....	271 C	Methodist
Jackson College; Jackson, Miss. (1877) (N).....	Jacob L. Reddix.....	786 C	State
Jackson College. See Tufts College.....			
Jamestown College; Jamestown, N. Dak. (1883).....	Samuel S. George.....	303 C	Presbyterian <sup>4</sup>
Jarvis Christian College; Hawkins, Tex. (1912) (N).....	Cleo W. Blackburn.....	150 C	Disc. of Christ
John Carroll University; Cleveland, Ohio (1886).....	V. Rev. F. E. Welfie.....	2,366 M <sup>6</sup>	Catholic <sup>4</sup>
Johns Hopkins University; Baltimore, Md. (1876).....	Lowell J. Reed.....	5,620 C	Private
Johnson C. Smith University; Charlotte, N. C. (1867) (N).....	H. Liston.....	626 C	Presbyterian <sup>4</sup>
Judson College; Marion, Ala. (1838).....	J. I. Riddle.....	192 F	Baptist
Juniata College; Huntingdon, Pa. (1876).....	Calvert N. Ellis.....	476 C	Brethren <sup>4</sup>
Kalamazoo College; Kalamazoo, Mich. (1833).....	Weimer K. Hicks.....	375 C	Baptist <sup>4</sup>
Kansas, University of; Lawrence, Kans. (1865).....	Franklin D. Murphy <sup>14</sup> .....	6,792 C	State
Kansas City, University of; Kansas City, Mo. (1933).....	Earl J. McGrath.....	975 C	Private
Kansas State College of Agr. & App. Sci.; Manhattan, Kans. (1863).....	James A. McCain.....	4,650 C	State
Kansas State Teachers College; Emporia, Kans. (1863).....	John E. King.....	1,092 C	State
Kansas State Teachers College; Pittsburg, Kans. (1903).....	Rees H. Hughes.....	1,642 C	State
Kent State University; Kent, Ohio (1910).....	George A. Bowman.....	4,700 C	State
Kentucky, University of; Lexington, Ky. (1865).....	H. L. Donovan.....	5,357 C	State
Kentucky State College; Frankfort, Ky. (1886) (N).....	Rufus B. Atwood.....	425 C	State
Kentucky Wesleyan College; Owensboro, Ky. (1866).....	Oscar W. Lever.....	357 C	Methodist <sup>4</sup>
Kenyon College; Gambier, Ohio (1824).....	Gordon K. Chalmers.....	420 M	Episcopal <sup>4</sup>
Keuka College; Keuka Park, N. Y. (1890).....	Katherine G. Blyley.....	341 F	Baptist <sup>4</sup>
King College; Bristol, Tenn. (1866).....	R. T. L. Liston.....	275 C	Presbyterian
Knox College; Galesburg, Ill. (1837).....	Sharvy G. Umbeck.....	744 C	Private
Knoxville College; Knoxville, Tenn. (1875) (N).....	James A. Colston.....	412 C	Presbyterian
Lafayette College; Easton, Pa. (1826).....	Ralph C. Hutchison.....	1,423 M	Presbyterian <sup>4</sup>
La Grange College; La Grange, Ga. (1831).....	Waight G. Henry, Jr.....	260 C	Methodist
Lake Erie College; Painesville, Ohio (1856).....	Paul Weaver.....	212 F	Private
Lake Forest College; Lake Forest, Ill. (1857).....	Ernest A. Johnson.....	605 C	Presbyterian <sup>4</sup>
Lander College; Greenwood, S. C. (1872).....	B. M. Grier.....	229 C	County
Lane College; Jackson, Tenn. (1882) (N).....	C. A. Kirkendall.....	342 C	Colored M.E. <sup>4</sup>
Langston University; Langston, Okla. (1897) (N).....	G. L. Harrison.....	723 C	State
La Salle College; Philadelphia, Pa. (1863).....	Brother E. Stanislaus.....	1,308 M	Catholic
La Sierra College; Arlington, Calif. (1922).....	Godfrey T. Anderson.....	751 C	7th Day Adven.
Lawrence College; Appleton, Wis. (1847).....	Douglas M. Knight.....	720 C	Methodist <sup>4</sup>
Lebanon Valley College; Annville, Pa. (1866).....	F. K. Miller.....	462 C	Evan. Un. Breth.
Lehigh University; Bethlehem, Pa. (1865).....	Martin D. Whitaker.....	2,908 M <sup>6</sup>	Private
Le Moyne College; Memphis, Tenn. (1871) (N).....	Hollis F. Price.....	460 C	Congregational <sup>4</sup>
Le Moyne College; Syracuse, N. Y. (1946).....	V. Rev. William J. Schlaerth.....	820 C	Catholic <sup>4</sup>
Lenoir Rhyne College; Hickory, N. C. (1891).....	Voigt R. Cromer.....	777 C	Lutheran
Lesley College; Cambridge, Mass. (1909).....	Trentwell M. White.....	321 F	Private
Lewis & Clark College; Portland, Oreg. (1867).....	Morgan S. Odell.....	943 C	Presbyterian <sup>4</sup>
Limestone College; Gaffney, S. C. (1845).....	A. J. Eastwood.....	219 F	Private
Lincoln Memorial University; Harrogate, Tenn. (1897).....	Robert L. Kincaid.....	371 C	Private
Lincoln University; Jefferson City, Mo. (1866) (N).....	Sherman D. Scruggs.....	817 C	State
Lincoln University; Lincoln University, Pa. (1854).....	Horace M. Bond.....	285 M <sup>4</sup>	Private
Lindenwood College; St. Charles, Mo. (1827).....	F. L. McCluer.....	353 F	Presbyterian
Linfield College; McMinnville, Oreg. (1848).....	Harry L. Dillin.....	460 C	Baptist <sup>4</sup>
Livingstone College; Salisbury, N. C. (1879) (N).....	William J. Trent.....	367 C	A. M. E. Zion
Long Beach State College; Long Beach, Calif. (1949).....	P. Victor Peterson.....	3,475 C	State



Institution, location and (date founded) <sup>1</sup>	Chief executive <sup>1</sup>	No. of students	Control <sup>1</sup>
Longwood College; Farmville, Va. (1884).....	Dabney S. Lancaster.....	653 F <sup>a</sup>	State
Loras College; Dubuque, Iowa (1839).....	M. Rev. Loras T. Lane.....	107 M	Catholic
Loretto Heights College; Loretto, Colo. (1891).....	Sister Frances Marie.....	480 F	Catholic <sup>4</sup>
Los Angeles City College; Los Angeles, Calif. (1929).....	Howard S. McDonald.....	16,675 C	City
Los Angeles St. Coll. of App. Arts & Sciences; Los Angeles (1947)	Howard S. McDonald.....	6,353 C	State
Louisiana College; Pineville, La. (1806).....	G. Earl Guinn.....	600 C	Baptist
Louisiana Polytechnic Institute; Ruston, La. (1894).....	R. L. Ropp.....	2,136 C	State
Louisiana State University & A & M Coll.; Baton Rouge, La. (1860)	Troy H. Middleton.....	7,786 C	State
Louisville, University of; Louisville, Ky. (1798).....	Philip Davidson.....	5,353 C	City
Lowell Technological Institute; Lowell, Mass. (1897).....	Martin J. Lydon.....	506 C	State
Loyola College; Baltimore, Md. (1852).....	Rev. Thomas J. Murray.....	1,125 C <sup>2a</sup>	Catholic <sup>4</sup>
Loyola University; Chicago, Ill. (1870).....	V. Rev. James T. Hussey.....	5,905 C	Catholic
Loyola University; Los Angeles, Calif. (1911).....	Charles S. Casassa.....	1,454 M	Catholic <sup>4</sup>
Loyola University; New Orleans, La. (1912).....	W. Patrick Donnelly.....	2,677 C	Catholic
Luther College; Decorah, Iowa (1861).....	J. W. Ylvisaker.....	791 C	Lutheran
Lycoming College; Williamsport, Pa. (1812).....	John W. Long.....	486 C	Methodist
Lynchburg College; Lynchburg, Va. (1903).....	Orville W. Wake.....	523 C	Disc. of Christ <sup>4</sup>
Macalester College; St. Paul, Minn. (1885).....	Charles J. Turck.....	1,415 C	Presbyterian <sup>4</sup>
MacMurray College for Women; Jacksonville, Ill. (1846).....	Louis W. Norris.....	429 F	Methodist <sup>4</sup>
McNeese State College; Lake Charles, La. (1939).....	Lether E. Frazar.....	998 C	State
McPherson College; McPherson, Kans. (1887).....	D. W. Bittinger.....	339 C	Brethren
Madison College; Harrisonburg, Va. (1908).....	G. Tyler Miller.....	969 F <sup>a</sup>	State
Maine, University of; Orono, Maine (1865).....	Arthur A. Hauck.....	2,813 C	State
Maine State Teachers College; Farmington, Maine (1864).....	Ermo H. Scott.....	310 C	State
Manchester College; North Manchester, Ind. (1889).....	Vernon F. Schwalm.....	610 C	Brethren
Manhattan College; New York, N. Y. (1853).....	Brother A. Philip.....	2,714 M	Catholic
Manhattantville College of the Sacred Heart; Purchase, N. Y. (1841)	Eleanor M. O'Byrne.....	474 F <sup>a</sup>	Catholic <sup>4</sup>
Marietta College; Marietta, Ohio (1835).....	W. Bay Irvine.....	665 C	Congregational <sup>4</sup>
Marquette University; Milwaukee, Wis. (1881).....	V. Rev. E. J. O'Donnell.....	7,529 C	Catholic
Marshall College; Huntington, W. Va. (1837).....	Stewart H. Smith.....	2,400 C	State
Mary Baldwin College; Staunton, Va. (1842).....	Charles W. McKenzie.....	238 F	Presbyterian <sup>4</sup>
Mary Hardin-Baylor College; Belton, Tex. (1845).....	A. C. Gettys <sup>12</sup> .....	350 F	Baptist
Mary Manse College; Toledo, Ohio (1922).....	Sister Vincent de Paul.....	175 F	Catholic
Mary Washington College; Fredericksburg, Va. (1908) <sup>2a</sup> .....	M. L. Combs.....	1,457 F <sup>a</sup>	State
Marygrove College; Detroit, Mich. (1910).....	Sister M. Honora.....	660 F	Catholic <sup>4</sup>
Maryknoll Teachers College; Maryknoll, N. Y. (1931).....	Mother M. J. Rogers.....	147 F	Catholic <sup>4</sup>
Maryland, University of; College Park, Md. (1807) <sup>5</sup> .....	Harry C. Byrd.....	8,570 C	State
Maryland State Teachers College; Bowie, Md. (1866) (N).....	William E. Henry.....	350 C	State
Maryland State Teachers College; Frostburg, Md. (1899).....	Lillian C. Compton.....	380 C	State
Maryland State Teachers College; Salisbury, Md. (1925).....	J. D. Blackwell.....	244 C	State
Maryland State Teachers College; Towson, Md. (1866).....	Earle T. Hawkins.....	959 C	State
Marylhurst College; Marylhurst, Oreg. (1930).....	Sister M. E. Clare.....	315 F	Catholic <sup>4</sup>
Marymount College; Salina, Kans. (1922).....	Mother M. Helena Robben.....	354 F	Catholic <sup>4</sup>
Marymount College; Tarrytown-on-Hudson, N. Y. (1907).....	Mother M. du Sacre Coeur.....	540 F <sup>44</sup>	Catholic <sup>4</sup>
Maryville College; Maryville, Tenn. (1819).....	Ralph W. Lloyd.....	633 C	Presbyterian <sup>4</sup>
Maryville College of the Sacred Heart; St. Louis, Mo. (1827).....	M. O. Mouton.....	315 F	Catholic <sup>4</sup>
Marywood College; Scranton, Pa. (1915).....	Sister M. Eugenia.....	648 F	Catholic <sup>4</sup>
Massachusetts, University of; Amherst, Mass. (1863).....	Ralph A. Van Meter.....	3,575 C	State
Massachusetts Institute of Technology; Cambridge, Mass. (1861)	James R. Killian, Jr.....	5,183 C	Private
Massachusetts School of Art; Boston, Mass. (1873).....	Gordon L. Reynolds.....	370 C	State
Massachusetts State Teachers College; Boston, Mass. (1852).....	William F. Looney.....	594 C	State
Massachusetts State Teachers College; Bridgewater, Mass. (1840)	Clement C. Maxwell.....	602 C	State
Massachusetts State Teachers College; Fitchburg, Mass. (1895).....	Ralph F. Weston.....	417 C	State
Massachusetts State Teachers College; Framingham, Mass. (1839)	Martin F. O'Connor.....	550 F	State
Massachusetts State Teachers College; Lowell, Mass. ....	Daniel H. O'Leary.....	410 C <sup>45</sup>	State
Massachusetts State Teachers College; North Adams, Mass. (1894)	Grover C. Bowman.....	150 C	State
Massachusetts State Teachers College; Salem, Mass. (1854).....	Frederick A. Meier.....	561 C	State
Massachusetts State Teachers College; Westfield, Mass. (1839).....	Edward J. Scanlon.....	213 C	State
Massachusetts State Teachers College; Worcester, Mass. (1871).....	Eugene A. Sullivan.....	391 C	State
Medcal Evangelists, College of; Los Angeles, Calif. (1910).....	W. E. Macpherson.....	618 C	7th Day Adven.
Memphis State College; Memphis, Tenn. (1912).....	J. M. Smith.....	2,500 C	State
Menlo College; Menlo Park, Calif. (1927).....	William E. Kratt.....	246 M	Private
Meriy College; Detroit, Mich. (1941).....	Sister Mary Lucille.....	470 F	Catholic <sup>4</sup>
Meriyhurst College for Women; Erie, Pa. (1926).....	Sister M. D. Preston.....	187 F	Catholic
Meedith College; Raleigh, N. C. (1899).....	Carlyle Campbell.....	642 F	Baptist
Miami, University of; Coral Gables, Fla. (1926).....	Jay F. W. Pearson.....	6,722 C	Private
Miami University; Oxford, Ohio (1809).....	John D. Millett.....	4,759 C	State
Michigan, University of; Ann Arbor, Mich. (1817).....	Harlan Hatcher.....	16,972 C	State
Michigan College of Mining & Technology; Houghton, Mich. (1885)	Grover C. Dillman.....	1,568 C	State
Michigan State College; East Lansing, Mich. (1855).....	John A. Hannah.....	13,382 C	State

Institution, location and (date founded) <sup>1</sup>	Chief executive <sup>2</sup>	No. of students	Control <sup>3</sup>
Michigan State Normal College; Ypsilanti, Mich. (1849).....	Eugene B. Elliott.....	2,352 C	State
Middle Tennessee State College; Murfreesboro, Tenn. (1911).....	Q. M. Smith.....	1,351 C	State
Middlebury College; Middlebury, Vt. (1800).....	Samuel S. Stratton.....	1,178 C	Private
Midland College; Fremont, Nebr. (1887).....	Paul W. Dieckman.....	325 C	Lutheran
Midwestern University; Wichita Falls, Tex. (1922).....	Dr. James B. Boren.....	1,350 C	City
Millikin University; Decatur, Ill. (1901).....	J. Walter Malone.....	829 C	Presbyterian <sup>4</sup>
Mills College; Oakland, Calif. (1852).....	Lynn T. White, Jr.....	555 F <sup>8</sup>	Private
Mississippi College; Jackson, Miss. (1890).....	Homer Ellis Finger, Jr.....	643 C	Methodist
Milwaukee-Downer College; Milwaukee, Wis. (1851).....	John B. Johnson, Jr.....	186 F	Private
Miner Teachers College; Washington, D. C. (1851) (N).....	M. J. Whitehead.....	635 C	City
Minnesota, University of; Minneapolis, Minn. (1851).....	J. L. Morrill.....	17,115 C	State
Minnesota State Teachers College; Bemidji, Minn. (1919).....	C. R. Sattgast.....	476 C	State
Minnesota State Teachers College; Mankato, Minn. (1868).....	C. L. Crawford.....	1,603 C	State
Minnesota State Teachers College; Moorhead, Minn. (1887).....	O. W. Snarr.....	583 C	State
Minnesota State Teachers College; St. Cloud, Minn. (1869) <sup>6</sup> .....	George F. Budd.....	1,119 C	State
Minnesota State Teachers College; Winona, Minn. (1858).....	Nels Minne.....	455 C	State
Misericordia, College; Dallas, Pa. (1923).....	Sister Mary Gonzaga.....	527 F	Catholic <sup>4</sup>
Mississippi, University of; University, Miss. (1848).....	J. D. Williams <sup>14</sup> .....	2,359 C	State
Mississippi College; Clinton, Miss. (1826).....	D. M. Nelson.....	1,164 C	Baptist
Mississippi Southern College; Hattiesburg, Miss. (1910).....	R. C. Cook.....	2,584 C	State
Mississippi State College; State College, Miss. (1878).....	Ben F. Hilburn.....	2,637 C	State
Mississippi State College for Women; Columbus, Miss. (1884).....	Charles P. Hogarth.....	854 F	State
Mississippi Vocational College; Itta Bena, Miss. (1950) (N).....	J. H. White.....	188 C	State
Missouri, University of; Columbia, Mo. (1839).....	Frederick A. Middlebush.....	8,169 C	State
Missouri Valley College; Marshall, Mo. (1888).....	M. Earle Collins.....	307 C	Presbyterian
Monmouth College; Monmouth, Ill. (1853).....	Robert W. Gibson.....	522 C	Presbyterian
Montana School of Mines; Butte, Mont. (1893).....	J. R. Van Pelt.....	238 C	State
Montana State College; Bozeman, Mont. (1893).....	Roland R. Renne.....	1,800 C	State
Montana State University; Missoula, Mont. (1893).....	Carl McFarland.....	2,041 C	State
Moravian College; Bethlehem, Pa. (1807).....	Raymond S. Haupert.....	498 C	Moravian <sup>4</sup>
Morehead State College; Morehead, Ky. (1923).....	Charles R. Spain.....	764 C	State
Morehouse College; Atlanta, Ga. (1867) (N).....	Benjamin E. Mays.....	521 M	Baptist <sup>4</sup>
Morgan State College; Baltimore, Md. (1867) (N).....	Martin D. Jenkins.....	1,639 C	State
Morningside College; Sioux City, Iowa (1894).....	Earl A. Roadman.....	627 C	Methodist
Morris Brown College; Atlanta, Ga. (1884) (N).....	John H. Lewis.....	584 C	A. M. E.
Mount Angel Seminary; St. Benedict, Oreg. (1889).....	Rt. Rev. Damian Jentges.....	101 M	Catholic
Mount Holyoke College; South Hadley, Mass. (1837).....	Roswell G. Ham.....	1,230 F	Private
Mount Mary College; Milwaukee, Wis. (1915).....	Edward A. Fitzpatrick.....	624 F	Catholic
Mount Mercy College; Pittsburgh, Pa. (1929).....	Mother M. M. Corbett.....	334 F	Catholic <sup>4</sup>
Mount St. Agnes College; Baltimore, Md. (1890).....	Sister M. Cleophas.....	187 F	Catholic <sup>4</sup>
Mount St. Joseph-on-the-Ohio, College of; Same (1854).....	Mother M. Romana.....	455 F	Catholic <sup>4</sup>
Mount St. Joseph Teachers College; Buffalo, N. Y. (1938).....	Sister M. Hubert.....	271 F	Private
Mount St. Mary College; Hooksett, N. H. (1934).....	Sister M. Mauritia.....	184 F	Catholic <sup>4</sup>
Mount St. Mary's College; Emmitsburg, Md. (1808).....	Rt. Rev. John L. Sheridan.....	475 M	Catholic
Mount St. Mary's College; Los Angeles, Calif. (1925).....	Sister Agnes Marie.....	520 F	Catholic <sup>4</sup>
Mount St. Scholastica College; Atchison, Kans. (1863).....	Mother M. A. Schroll.....	381 F	Catholic <sup>4</sup>
Mount St. Vincent, College of; On-Hudson, N. Y. (1847).....	Sister Catharine Marie <sup>17</sup> .....	475 F	Catholic <sup>4</sup>
Mount Union College; Alliance, Ohio (1846).....	Carl C. Bracy.....	883 C	Methodist <sup>4</sup>
Muhlenberg College; Allentown, Pa. (1848).....	J. Conrad Seegers.....	678 M	Lutheran <sup>4</sup>
Mundelein College for Women; Chicago, Ill. (1930).....	Sister Mary John Michael.....	874 F	Catholic <sup>4</sup>
Murray State College; Murray, Ky. (1922).....	Ralph H. Woods.....	1,391 C	State
Muskingum College; New Concord, Ohio (1837).....	Robert N. Montgomery.....	673 C	Presbyterian
National College of Education; Evanston, Ill. (1886).....	K. Richard Johnson.....	348 C	Private
Nazareth College; Louisville, Ky. (1920).....	Sister M. Gertrude.....	750 F	Catholic <sup>4</sup>
Nazareth College; Nazareth, Mich. (1897).....	Sister M. Kathleen.....	298 F	Catholic <sup>4</sup>
Nazareth College; Rochester, N. Y. (1924).....	Rev. Mother M. Helene.....	426 F	Catholic
Nebraska, University of; Lincoln, Neb. (1869).....	Clifford Hardin <sup>14</sup> .....	6,480 C	State
Nebraska State Teachers College; Chadron, Nebr. (1911).....	Wiley G. Brooks.....	339 C	State
Nebraska State Teachers College; Kearney, Nebr. (1905).....	Herbert L. Cushing.....	615 C	State
Nebraska State Teachers College; Peru, Nebr. (1867).....	Neal S. Gomon.....	385 C	State
Nebraska State Teachers College; Wayne, Nebr. (1910).....	John D. Rice.....	647 C	State
Nebraska Wesleyan University; Lincoln, Nebr. (1887).....	A. Leland Forrest <sup>14</sup> .....	609 C	Methodist
Nevada, University of; Reno, Nev. (1874).....	Minard W. Stout.....	1,096 C	State
New Bedford Inst. of Textiles & Tech.; New Bedford, Mass. (1895).....	John E. Foster.....	251 C	State
New Church, Academy of the; Bryn Athyn, Pa. (1876).....	George de Charms.....	60 C	( <sup>20</sup> )
New England Conservatory of Music; Boston, Mass. (1867).....	Harrison Keller.....	335 C	Private
New Hampshire, University of; Durham, N. H. (1866).....	Robert F. Chandler, Jr.....	2,777 C	State
New Hampshire State Teachers College; Keene, N. H. (1909).....	Lloyd P. Young.....	455 C	State
New Hampshire State Teachers College; Plymouth, N. H. (1871).....	Harold E. Hyde.....	278 C	State
New Jersey College for Women; New Brunswick, N. J. (1918) <sup>28</sup> ...	Margaret T. Corwin <sup>17</sup> ....	1,070 F	State



Institution, location and (date founded) <sup>1</sup>	Chief executive <sup>2</sup>	No. of students	Control <sup>3</sup>
New Jersey State Teachers College; Glassboro, N. J. (1923).....	Thomas E. Robinson.....	425 C	State
New Jersey State Teachers College; Jersey City, N. J. (1929).....	Forrest A. Irwin.....	430 C	State
New Jersey State Teachers College; Newark, N. J. (1913) <sup>27</sup> .....	Eugene G. Wilkins.....	700 C	State
New Jersey State Teachers College; Paterson, N. J. (1923) <sup>27</sup> .....	Clair S. Wightman.....	528 C	State
New Jersey State Teachers College; Trenton, N. J. (1855).....	Roscoe L. West.....	801 C	State
New Jersey State Teachers College; Upper Montclair, N. J. (1908).....	E. DeAlton Partridge.....	1,502 C	State
New Mexico, University of; Albuquerque, N. Mex. (1889).....	Tom L. Popejoy.....	3,819 C	State
New Mexico College of A & M Arts; State College, N. Mex. (1889).....	J. W. Branson.....	1,497 C	State
New Mexico Highlands University; Las Vegas, N. M. (1893).....	Thomas C. Donnelly.....	520 C	State
New Mexico Institute of Mining & Tech.; Socorro, N. Mex. (1889).....	E. J. Workman.....	175 C	State
New Mexico Military Institute; Roswell, N. Mex. (1891).....	Col. Charles F. Ward <sup>28</sup> .....	661 M	State
New Mexico Western College; Silver City, N. Mex. (1893).....	J. Cloyd Miller.....	450 C	State
New Rochelle, College of; New Rochelle, N. Y. (1904).....	Mother Dorothea Dunkerley.....	800 F	Catholic <sup>4</sup>
New York, College of the City of:.....			
Brooklyn College; Brooklyn, N. Y. (1930).....	Harry D. Gideonse.....	9,112 C	City
City College; New York, N. Y. (1847).....	Buell G. Gallagher.....	17,605 C	City
Hunter College; New York, N. Y. (1870).....	George N. Shuster.....	7,846 F <sup>29</sup>	City
Queens College; Flushing, N. Y. (1937).....	John J. Theobald.....	3,770 C	City
New York, State University of; Albany, N. Y.:			
College of Agriculture at Cornell U.; Ithaca, N. Y.:	William S. Carlson.....	39,264 C	State
College of Ceramics at Alfred U.; Alfred, N. Y. (1900).....	William I. Myers <sup>17</sup> .....	1,608 C	State
College of Forestry; Syracuse, N. Y. (1911).....	John F. McMahon <sup>17</sup> .....	309 C	State
College of Home Economics at Cornell U.; Ithaca, N. Y. (1925).....	Hardy L. Shirley <sup>17</sup> .....	628 M <sup>8</sup>	State
College of Medicine at New York City; Brooklyn, N. Y. (1857).....	Helen G. Canoyer <sup>17</sup> .....	655 F <sup>8</sup>	State
College of Medicine at Syracuse; Syracuse, N. Y. (1834).....	Jean A. Curran <sup>17</sup> .....	571 C	State
Harpur College; Endicott, N. Y. (1950).....	William R. Willard <sup>17</sup> .....	278 C	State
Maritime College; New York, N. Y. (1874).....	Glenn G. Bartle <sup>18</sup> .....	811 C	State
School of Ind. & Labor Rel. at Cornell U.; Ithaca, N. Y. (1945).....	Vice Adm. C. T. Durgin.....	532 M	State
Teachers College; Albany, N. Y. (1844).....	M. P. Catherwood <sup>17</sup> .....	357 C	State
Teachers College; Brockport, N. Y. (1867).....	Evan R. Collins.....	1,849 C	State
Teachers College; Buffalo, N. Y. (1866).....	Donald M. Tower.....	926 C	State
Teachers College; Cortland, N. Y. (1863).....	Harvey M. Rice.....	2,085 C	State
Teachers College; Fredonia, N. Y. (1867).....	Donnal V. Smith.....	1,502 C	State
Teachers College; Geneseo, N. Y. (1871).....	Harry W. Porter.....	752 C	State
Teachers College; New Paltz, N. Y. (1885).....	Kenneth Freeman <sup>18</sup> .....	903 C	State
Teachers College; Oneonta, N. Y. (1889).....	William J. Haggerty.....	959 C	State
Teachers College; Oswego, N. Y. (1861).....	Royal F. Netzer.....	723 C	State
Teachers College; Plattsburgh, N. Y. (1889).....	Foster S. Brown.....	1,338 C	State
Teachers College; Potsdam, N. Y. (1869).....	George W. Angell.....	847 C	State
Veterinary College at Cornell U.; Ithaca, N. Y. (1894).....	Frederick W. Crumb.....	688 C	State
New York University; New York, N. Y. (1831).....	William A. Hagan <sup>17</sup> .....	195 C	State
Newark College of Engineering; Newark, N. J. (1881).....	Henry T. Heald.....	37,055 C <sup>30</sup>	Private
Newberry College; Newberry, S. C. (1856).....	Robert W. Van Houten.....	2,863 C	City & State
Newcomb College; New Orleans, La. (1886) <sup>31</sup> .....	James C. Kinard.....	358 C	Lutheran
Niagara University; Niagara University, N. Y. (1856).....	John R. Hubbard <sup>17</sup> .....	641 F	Private
North Carolina, Agr. & Tech. Coll. of; Greensboro, N. C. (1891) (N).....	V. Rev. F. L. Meade.....	1,205 C	Catholic
North Carolina, University of; Chapel Hill, N. C.:			
College of Agriculture & Engineering; Raleigh, N. C. (1889).....	F. D. Bluford.....	2,932 C	State & Federal
Woman's College; Greensboro, N. C. (1891).....	Gordon Gray.....	.....	State
University of N. C. at Chapel Hill; Chapel Hill, N. C. (1789).....	Carey H. Bostian <sup>14</sup> .....	3,839 C	State
North Carolina College; Durham, N. C. (1910) (N).....	Edward K. Graham <sup>14</sup> .....	2,375 F <sup>8</sup>	State
North Carolina State Teachers Coll.; Elizabeth City, N. C. (1891)(N).....	Robert B. House <sup>14</sup> .....	5,218 C	State
North Carolina State Teachers College; Fayetteville, N. C. (1877)(N).....	Alfonso Elder.....	1,373 C	Private
North Carolina State Teachers Coll.; Winston-Salem (1892) (N).....	S. D. Williams.....	484 C	State
North Central College; Naperville, Ill. (1861).....	J. W. Seabrook.....	631 C	State
North Dakota, University of; Grand Forks, N. Dak. (1883).....	Francis L. Atkins.....	661 C	State
North Dakota Agricultural College; Fargo, N. Dak. (1889).....	C. Harve Geiger.....	567 C	Evan. Un. Breth. <sup>4</sup>
North Dakota State Normal & Ind. College; Ellendale, N. Dak. (1889).....	John C. West.....	2,379 C	State
North Dakota State Teachers College; Dickinson, N. Dak. (1917).....	Fred S. Hultz.....	1,580 C	State
North Dakota State Teachers College; Mayville, N. Dak. (1889).....	J. C. McMiltz.....	107 C	State
North Dakota State Teachers College; Minot, N. Dak. (1913).....	Charles E. Scott.....	238 C	State
North Dakota State Teachers College; Valley City, N. Dak. (1890) <sup>11</sup> .....	C. P. Lura.....	235 C	State
North Georgia College; Dahlonega, Ga. (1873).....	C. C. Swain.....	576 C	State
North Texas State College; Denton, Tex. (1890).....	R. L. Lokken.....	369 C	State
Northeast Missouri State Teachers College; Kirksville, Mo. (1867).....	Merritt E. Hoag.....	475 C	State
Northeastern State College; Tahlequah, Okla. (1846).....	J. C. Matthews.....	4,452 C	State
Northeastern University; Boston, Mass. (1898).....	Walter H. Ryle.....	1,075 C	State
Northern Baptist Theological Seminary; Chicago, Ill. (1913).....	Harrell E. Garrison.....	995 C	State
Northern Illinois State Teachers College; DeKalb, Ill. (1895).....	Carl S. Eli.....	13,820 C	Private
Northern Michigan College of Education; Marquette, Mich. (1899).....	Charles W. Koller.....	350 C	Baptist <sup>4</sup>
Northern State Teachers College; Aberdeen, S. Dak. (1901).....	Leslie A. Holmes.....	2,129 C	State
	H. A. Tape.....	589 C	State
	Warren C. Lovinger.....	587 C	State



Institution, location and (date founded) <sup>1</sup>	Chief executive <sup>2</sup>	No. of students	Control <sup>3</sup>
Northwest Missouri State College; Maryville, Mo. (1905).....	J. W. Jones.....	694 C	State
Northwest Nazarene College; Nampa, Idaho (1913).....	John Riley.....	424 C	Nazarene
Northwestern State College; Alva, Okla. (1897).....	Sabin C. Percefull.....	425 C	State
Northwestern State College of Louisiana; Natchitoches, La. (1884).....	John S. Kyser.....	1,390 C	State
Northwestern University; Evanston, Ill. (1851).....	J. Roscoe Miller.....	7,273 C	Private
Norwich University; Northfield, Vt. (1819).....	Maj. Gen. E. N. Harmon.....	664 M	Private
Notre Dame, University of; Notre Dame, Ind. (1842).....	Rev. Theodore M. Hesburgh.....	5,077 M <sup>6</sup>	Catholic <sup>4</sup>
Notre Dame College; Cleveland, Ohio (1923).....	Mother Mary Anselm.....	255 F	Catholic <sup>4</sup>
Notre Dame College of Staten Island; Staten Island, N. Y. (1931).....	Mother Saint Egbert <sup>13</sup> .....	250 F	Catholic <sup>4</sup>
Notre Dame Seminary; New Orleans, La. (1923).....	Rev. Thomas V. Bolduc <sup>16</sup> .....	85 M	Catholic
Oberlin College; Oberlin, Ohio (1833).....	William E. Stevenson.....	1,888 C	Private <sup>10</sup>
Occidental College; Los Angeles, Calif. (1887).....	Arthur G. Coons.....	1,287 C	Presbyterian <sup>4</sup>
Oglethorpe University; Atlanta, Ga. (1835).....	J. Whitney Bunting.....	306 C	Private
Ohio State University; Columbus, Ohio (1873).....	Howard L. Bevis.....	17,131 C	State
Ohio University; Athens, Ohio (1804).....	John C. Baker.....	4,231 C	State
Ohio Wesleyan University; Delaware, Ohio (1842).....	Arthur S. Flemming.....	1,878 C	Methodist <sup>4</sup>
Oklahoma, University of; Norman, Okla. (1890).....	George L. Cross.....	8,383 C	State
Oklahoma A & M College; Stillwater, Okla. (1891).....	Oliver S. Willham.....	7,184 C	State
Oklahoma Baptist University; Shawnee, Okla. (1910).....	John W. Raley.....	989 C	Baptist
Oklahoma City University; Oklahoma City, Okla. (1904).....	Clustor Q. Smith.....	2,663 C	Methodist <sup>4</sup>
Oklahoma College for Women; Chickasha, Okla. (1908).....	Dan Procter.....	814 F	State
Omaha, Municipal University of; Omaha, Nebr. (1908).....	Milo Bail.....	3,663 C	City
Oregon, University of; Eugene, Oreg. (1872).....	O. Meredith Wilson.....	3,677 C	State
Oregon College of Education; Monmouth, Oreg. (1882).....	Robert J. Maaske.....	468 C	State
Oregon State College; Corvallis, Oreg. (1868).....	A. L. Strand.....	4,613 C	State
Ottawa University; Ottawa, Kans. (1865).....	Andrew B. Martin.....	361 C	Baptist <sup>4</sup>
Otterbein College; Westerville, Ohio (1847).....	J. Gordon Howard.....	627 C	Evan. U. Breth. <sup>4</sup>
Ouachita Baptist College; Arkadelphia, Ark. (1886).....	Ralph A. Phelps, Jr.....	521 C	Baptist
Our Lady of the Elms, College of; Chicopee, Mass. (1928).....	Most Rev. C. J. Weldon.....	300 F	Catholic
Our Lady of the Lake College; San Antonio, Texas (1912) <sup>5</sup> .....	John L. McMahon.....	350 F <sup>8</sup>	Private
Ozarks, College of the; Clarksville, Ark. (1834).....	Winslow S. Drummond.....	216 C	Presbyterian
Pacific, College of the; Stockton, Calif. (1851).....	Robert E. Burns.....	1,228 C	Methodist <sup>4</sup>
Pacific Lutheran College; Parkland, Wash. (1894).....	S. C. Eastwood.....	1,061 C	Lutheran
Pacific Union College; Angwin, Calif. (1882).....	John E. Weaver.....	782 C	7th Day Adven.
Pacific University; Forest Grove, Oreg. (1849).....	Charles J. Armstrong.....	514 C	Congregational <sup>4</sup>
Paine College; Augusta, Ga. (1882) (N).....	E. C. Peters.....	276 C	Meth. & C.M.E.
Panhandle A & M College; Goodwell, Okla. (1909).....	Marvin McKee.....	534 C	State
Park College; Parkville, Mo. (1875).....	J. L. Zwingle.....	307 C	Presbyterian <sup>4</sup>
Parsons College; Fairfield, Iowa (1875).....	Tom E. Shearer.....	221 C	Presbyterian <sup>4</sup>
Pasadena College; Pasadena, Calif. (1902).....	W. T. Purkiser.....	708 C	Nazarene
Pembroke College; Providence, R. I. (1891) <sup>12</sup> .....	Nancy D. Lewis <sup>17</sup> .....	759 F	Private
Pembroke State College; Pembroke, N. C. (1887).....	R. D. Wellons.....	110 C	State
Pennsylvania, University of; Philadelphia, Pa. (1740).....	Gaylord P. Harnwell.....	13,810 Co <sup>12</sup>	Private
Pennsylvania College for Women; Pittsburgh, Pa. (1869).....	Paul R. Anderson.....	425 F	Private
Pennsylvania State Teachers College; Bloomsburg, Pa. (1839).....	Harvey A. Andross.....	713 C	State
Pennsylvania State Teachers College; California, Pa. (1852).....	C. Herman Grose.....	655 C	State
Pennsylvania State Teachers College; Cheyney, Pa. (1837).....	James H. Duckrey.....	377 C	State
Pennsylvania State Teachers College; Clarion, Pa. (1867).....	Paul G. Chandler.....	415 C	State
Pennsylvania State Teachers College; East Stroudsburg, Pa. (1893).....	Joseph F. Noonan.....	683 C	State
Pennsylvania State Teachers College; Edinboro, Pa. (1862).....	L. H. Van Houten.....	348 C	State
Pennsylvania State Teachers College; Indiana, Pa. (1875).....	Willis E. Pratt.....	1,500 C	State
Pennsylvania State Teachers College; Kutztown, Pa. (1866).....	Q. A. W. Rohrbach.....	727 C	State
Pennsylvania State Teachers College; Lock Haven, Pa. (1877).....	Richard T. Parsons.....	500 C	State
Pennsylvania State Teachers College; Mansfield, Pa. (1857).....	James G. Morgan.....	575 C	State
Pennsylvania State Teachers College; Millersville, Pa. (1855).....	D. L. Biemesderfer.....	675 C	State
Pennsylvania State Teachers College; Shippensburg, Pa. (1871).....	Harry L. Kriner.....	615 C	State
Pennsylvania State Teachers College; Slippery Rock, Pa. (1889).....	Dale W. Houk.....	720 C	State
Pennsylvania State Teachers College; West Chester, Pa. (1871).....	Charles S. Swope.....	1,591 C	State
Pennsylvania State University; State College, Pa. (1883).....	Milton S. Eisenhower.....	12,241 C	State
Philander Smith College; Little Rock, Ark. (1868) (N).....	M. LaFayette Harris.....	541 C	Methodist
Phillips University; Enid, Okla. (1906).....	Eugene S. Briggs.....	905 C	Disc. of Christ
Pittsburgh, University of; Pittsburgh, Pa. (1877).....	R. H. Fitzgerald <sup>14</sup> .....	14,384 C	Private
Pomona College; Claremont, Calif. (1887).....	E. Wilson Lyon.....	986 C	Private
Portland, University of; Portland, Oreg. (1901).....	Rev. Michael J. Gavin.....	1,113 C	Catholic <sup>4</sup>
Prairie View A & M College; Prairie View, Tex. (1876) (N).....	E. B. Evans.....	2,525 C	State
Pratt Institute; Brooklyn, N. Y. (1887).....	Francis H. Horn.....	1,412 C	Private
Presbyterian College; Clinton, S. C. (1880).....	Marshall W. Brown.....	467 C	Presbyterian
Princeton University; Princeton, N. J. (1746).....	Harold W. Dodds.....	3,416 M	Private
Principia College; Elmhurst, Ill. (1898).....	William E. Morgan.....	441 C	Private <sup>33</sup>

Institution, location and (date founded) <sup>1</sup>	Chief executive <sup>2</sup>	No. of students	Control <sup>3</sup>
Providence College; Providence, R. I. (1917).....	V. Rev. Robert J. Slavin.....	1,200 M	Catholic <sup>4</sup>
Puerto Rico, Polytechnic Institute of; San Germán, P. R. (1912).....	Edward G. Seel.....	476 C	Presbyterian <sup>4</sup>
Puerto Rico, University of; Rio Piedras, P. R. (1903).....	Jaime Benítez <sup>14</sup> .....	11,387 C	Private
Puget Sound, College of; Tacoma, Wash. (1888).....	R. Franklin Thompson.....	1,289 C	Methodist <sup>4</sup>
Purdue University; Lafayette, Ind. (1869).....	Frederick L. Hovde.....	9,296 C	State
Queens College; Charlotte, N. C. (1857).....	Edwin R. Walker.....	379 C	Presbyterian
Queens College (NYC). See New York, College of the City of.....			
Radcliffe College; Cambridge, Mass. (1879) <sup>34</sup> .....	Wilbur K. Jordan.....	1,380 F	Private
Radford College; Radford, Va. (1913) <sup>35</sup> .....	Charles K. Martin, Jr.....	709 F	State
Randolph-Macon College; Ashland, Va. (1830).....	J. Earl Moreland.....	398 M <sup>4</sup>	Methodist <sup>4</sup>
Randolph-Macon Woman's College; Lynchburg, Va. (1891).....	W. F. Quillian, Jr.....	611 F	Methodist <sup>4</sup>
Redlands, University of; Redlands, Calif. (1909).....	George H. Armacost.....	1,106 C	Baptist <sup>4</sup>
Reed College; Portland, Oreg. (1911).....	Duncan S. Ballantine.....	576 C	Private
Regis College; Denver, Colo. (1887).....	Rev. Richard F. Ryan.....	676 M <sup>4</sup>	Catholic
Regis College; Weston, Mass. (1927).....	Sister Mary Alice.....	587 F	Catholic <sup>4</sup>
Rensselaer Polytechnic Institute; Troy, N. Y. (1824).....	Livingston W. Houston.....	3,268 C	Private
Rhode Island, University of; Kingston, R. I. (1892).....	Carl R. Woodward.....	1,916 C	State
Rhode Island College of Education; Providence, R. I. (1854).....	William C. Gaige.....	465 C	State
Rhode Island School of Design; Providence, R. I. (1877).....	Max W. Sullivan.....	634 C	Private
Rice Institute; Houston, Tex. (1912).....	William W. Houston.....	1,629 C	Private
Richmond, University of; Richmond, Va. (1830).....	George M. Modlin.....	1,598 Co <sup>36</sup>	Baptist <sup>4</sup>
Ricks College; Rexburg, Idaho (1888).....	John L. Clarke.....	450 C	Latterday Saints
Ripon College; Ripon, Wis. (1851).....	Clark G. Kuebler.....	488 C	Private
Rivier College; Nashua, N. H. (1933).....	Sister Marie Carmella.....	282 F <sup>8</sup>	Catholic <sup>4</sup>
Roanoke College; Salem, Va. (1842).....	H. Sherman Oberly.....	409 C	Lutheran <sup>4</sup>
Rochester, University of; Rochester, N. Y. (1850).....	Cornelis W. de Kiewiet.....	3,023 C	Private
Rockford College; Rockford, Ill. (1847).....	Mary A. Cheek.....	258 F <sup>37</sup>	Cong.-Chr. <sup>4</sup>
Rockhurst College; Kansas City, Mo. (1910).....	Rev. M. E. Van Ackeren.....	900 M	Catholic <sup>4</sup>
Rocky Mountain College; Billings, Mont. (1947).....	Herbert W. Hines.....	230 C	( <sup>38</sup> )
Rollins College; Winter Park, Fla. (1835).....	Hugh F. McKean.....	501 C	Private
Roosevelt College of Chicago; Chicago, Ill. (1945).....	Edward J. Sparling.....	3,033 C	Private
Rosary College; River Forest, Ill. (1901).....	Sister M. Timothea.....	694 F <sup>8</sup>	Catholic <sup>4</sup>
Rose Polytechnic Institute; Terre Haute, Ind. (1874).....	F. L. Wilkinson.....	307 M	Private
Rosemont College of Holy Child Jesus; Rosemont, Pa. (1921).....	Mother Mary Chrysostom.....	370 F	Catholic <sup>4</sup>
Russell Sage College; Troy, N. Y. (1916).....	Lewis A. Froman.....	625 F <sup>8</sup>	Private
Rust College; Holly Springs, Miss. (N).....	L. M. McCoy.....	266 C <sup>45</sup>	Methodist
Rutgers University; New Brunswick, N. J. (1766).....	Lewis W. Jones.....	12,981 Co <sup>38</sup>	State & Private
Sacramento State College; Sacramento, Calif. (1947).....	Guy A. West.....	3,019 C	State
Sacred Heart, College of the; Santurce, P. R. (1880).....	Mother Raquel Perez.....	133 F	Catholic <sup>4</sup>
St. Ambrose College; Davenport, Iowa (1882).....	Msr. Ambrose J. Burke.....	691 M <sup>6</sup>	Catholic
St. Anselm's College; Manchester, N. H. (1889).....	Rt. Rev. B. C. Dolan.....	560 M <sup>6</sup>	Catholic
St. Augustine's College; Raleigh, N. C. (1867) (N).....	Harold L. Trigg.....	527 C	Episcopal
St. Benedict, College of; St. Joseph, Minn. (1913).....	Mother Richarda Peters.....	225 F	Catholic <sup>4</sup>
St. Benedict's College; Atchison, Kans. (1859).....	Rt. Rev. Cuthbert McDonald.....	430 M	Catholic <sup>4</sup>
St. Bernard College; St. Bernard, Ala. (1892).....	Rt. Rev. Bede Luibel.....	226 M	Catholic <sup>4</sup>
St. Bernardine of Siena College; Loudonville, N. Y. (1937).....	V. Rev. Bertrand J. Campbell.....	1,269 M <sup>6</sup>	Catholic <sup>4</sup>
St. Bonaventure University; Allegany, N. Y. (1856).....	Rev. Juvenal Lalor.....	1,460 C	Catholic
St. Catherine, College of; St. Paul, Minn. (1905).....	Sister Antonine.....	850 F	Catholic <sup>4</sup>
St. Edward's Seminary; Kenmore, Wash. (1930).....	V. Rev. John R. Sullivan.....	208 M	Catholic
St. Elizabeth, College of; Convent Station, N. J. (1899).....	Sister H. M. Mahoney.....	443 F	Catholic <sup>4</sup>
St. Francis, College of; Joliet, Ill. (1925).....	Sister Mary Elvira.....	382 F	Catholic <sup>4</sup>
St. Francis College; Loretto, Pa. (1847).....	Rev. Xavier Crowley.....	381 C	Catholic <sup>4</sup>
St. Francis Xavier College for Women; Chicago, Ill. (1912).....	Mother Mary Huberta.....	267 F	Catholic <sup>4</sup>
St. John's College; Annapolis, Md. (1696).....	Richard D. Weigle.....	120 C	Private
St. John's College; Camarillo, Calif. (1939).....	V. Rev. F. B. Koepfer.....	97 M	Catholic
St. John's University; Brooklyn, N. Y. (1870).....	V. Rev. John A. Flynn.....	6,372 C	Catholic
St. John's University; Collegeville, Minn. (1857).....	Rt. Rev. B. Dworschak.....	983 M	Catholic <sup>4</sup>
St. Joseph College; Emmitsburg, Md. (1809).....	Sister Mary Agnes.....	233 F	Catholic
St. Joseph College; West Hartford, Conn. (1932).....	Mother M. Ethelreda.....	340 F	Catholic
St. Joseph's College; Collegeville, Ind. (1891).....	V. Rev. R. H. Gross.....	544 M	Catholic
St. Joseph's College; Philadelphia, Pa. (1851).....	V. Rev. E. G. Jacklin.....	1,060 M	Catholic
St. Joseph's College for Women; Brooklyn, N. Y. (1916).....	Rt. Rev. W. T. Dillon.....	285 F	Catholic <sup>4</sup>
St. Lawrence University; Canton, N. Y. (1856).....	Eugene G. Bewkes.....	1,172 C	Private
St. Louis University; St. Louis, Mo. (1818).....	Rev. Paul C. Reinert.....	9,382 C	Catholic <sup>4</sup>
St. Martin's College; Olympia, Wash. (1895).....	Rt. Rev. Raphael Heider.....	190 M	Catholic
St. Mary College; Xavier, Kans. (1923).....	Arthur M. Murphy.....	401 F	Catholic
St. Mary of the Springs, College of; Columbus, Ohio (1911).....	Sister M. Angelita.....	233 F	Catholic <sup>4</sup>
St. Mary-of-the-Wasatch, College of; Salt Lake City, Utah (1926).....	Sister M. Consolata.....	115 F	Catholic <sup>4</sup>

Institution, location and (date founded) <sup>1</sup>	Chief executive <sup>2</sup>	No. of students	Control <sup>3</sup>
St. Mary-of-the-Woods Coll.; St. Mary-of-the-Woods, Ind. (1840)	(Vacant)	293 F	Catholic <sup>4</sup>
St. Mary's College; Notre Dame, Ind. (1844)	Sister M. Madeleva	775 F	Catholic <sup>4</sup>
St. Mary's College; St. Mary's College, Calif. (1863)	Brother W. Thomas	383 M	Catholic <sup>4</sup>
St. Mary's College; Winona, Minn. (1913)	Brother J. Ambrose	589 M	Catholic <sup>4</sup>
St. Mary's Dominican College; New Orleans, La. (1910)	Sister Mary Louise	256 F	Catholic <sup>4</sup>
St. Mary's Seminary & University; Baltimore, Md. (1791)	Lloyd P. McDonald	800 M	Catholic
St. Mary's University; San Antonio, Tex. (1852)	Rev. W. J. Buehler	1,189 M <sup>6</sup>	Catholic <sup>4</sup>
St. Michael's College; Winooski, Vt. (1904)	V. Rev. F. E. Moriarty	750 M <sup>6</sup>	Catholic <sup>4</sup>
St. Norbert College; West De Pere, Wis. (1898)	Rt. Rev. S. M. Killeen <sup>20</sup>	513 C	Catholic
St. Olaf College; Northfield, Minn. (1874)	Clemens M. Granskou	1,417 C	Lutheran <sup>4</sup>
St. Patrick's Seminary; Menlo Park, Calif. (1898)	Thomas C. Mulligan	221 M	Catholic
St. Paul Seminary; St. Paul, Minn. (1896)	Rev. Rudolph G. Bandas	371 M	Catholic
St. Paul's Polytechnic Institute; Lawrenceville, Va. (1888) (N)	Earl H. McClenney	358 C	Episcopal <sup>4</sup>
St. Peter's College; Jersey City, N. J. (1872)	V. Rev. J. J. Shanahan	1,600 M <sup>6</sup>	Catholic
St. Rose, College of; Albany, N. Y. (1920)	Sister C. Francis	748 F <sup>8</sup>	Catholic <sup>4</sup>
St. Scholastica, College of; Duluth, Minn. (1912)	Mother A. Braegelmann	400 F	Catholic <sup>4</sup>
St. Teresa, College of; Kansas City, Mo. (1917)	Sister M. B. O'Neill	407 F <sup>8</sup>	Catholic <sup>4</sup>
St. Teresa, College of; Winona, Minn. (1907)	Sister M. C. Bowe	532 F	Catholic <sup>4</sup>
St. Thomas, College of; St. Paul, Minn. (1885)	V. Rev. V. J. Flynn	1,217 M <sup>6</sup>	Catholic
St. Vincent College; Latrobe, Pa. (1846)	Rt. Rev. D. O. Strittmatter	774 M	Catholic
Salem Academy & College; Winston-Salem, N. C. (1772)	Dale H. Gramley	321 F <sup>8</sup>	Moravian
Sam Houston State Teachers College; Huntsville, Tex. (1879)	Harmon Lowman	1,705 C	State
San Diego State College; San Diego, Calif. (1897)	Malcolm A. Love	5,109 C	State
San Francisco, University of; San Francisco, Calif. (1855)	Rev. William J. Dunne	2,483 M <sup>6</sup>	Catholic
San Francisco College for Women; San Francisco, Calif. (1930)	Mother Leonor Mejia	442 F	Catholic
San Francisco State College; San Francisco, Calif. (1899)	J. Paul Leonard	4,294 C	State
San Jose State College; San Jose, Calif. (1857)	John T. Wahlquist	6,708 C	State
Santa Clara, University of; Santa Clara, Calif. (1851)	Rev. Herman J. Hauck	1,140 M	Catholic <sup>4</sup>
Sarah Lawrence College; Bronxville, N. Y. (1926)	Harold Taylor	367 F <sup>8</sup>	Private
Savannah State College; Savannah, Ga. (1890) (N) <sup>5</sup>	W. K. Payne	934 C	State
Scarritt College for Christian Workers; Nashville, Tenn. (1892)	Hugh C. Stuntz	121 C	Methodist
Scranton, University of; Scranton, Pa. (1888)	V. Rev. John J. Long	1,717 M <sup>6</sup>	Catholic
Scripps College; Claremont, Calif. (1926)	Frederick Hard	216 Co	Private
Seattle Pacific College; Seattle, Wash. (1891)	C. Hoyt Watson	821 C	Methodist <sup>4</sup>
Seattle University; Seattle, Wash. (1891)	V. Rev. A. A. Lemieux	1,979 C	Catholic
Seneca, Colleges of the; Geneva, N. Y.	Alan W. Brown	847 Co <sup>45</sup>	Private
Seton Hall University; South Orange, N. J. (1856)	John L. McNulty	5,743 M <sup>6,45</sup>	Catholic
Seton Hill College; Greensburg, Pa. (1883)	Rev. William G. Ryan	400 F	Catholic <sup>4</sup>
Shaw University; Raleigh, N. C. (1865) (N)	William R. Strassner	514 C	Baptist <sup>4</sup>
Shepherd State College; Shepherdstown, W. Va. (1871)	Oliver S. Ikenberry	512 C	State
Shorter College; Rome, Ga. (1873)	George A. Christenberry	160 F <sup>8</sup>	Baptist <sup>4</sup>
Siena Heights College; Adrian, Mich. (1919)	Mother Mary Gerald	337 F	Catholic <sup>4</sup>
Simmons College; Boston, Mass. (1899)	Bancroft Beatley	1,320 F <sup>8</sup>	Private
Simpson College; Indianola, Iowa (1860)	William E. Kerstetter	390 C	Methodist
Skidmore College; Saratoga Springs, N. Y. (1911)	Henry T. Moore	1,004 F <sup>8</sup>	Private
Smith College; Northampton, Mass. (1871)	Benjamin F. Wright	2,273 F	Private
South, University of the; Seawane, Tenn. (1857)	Edward McCrady	505 M	Episcopal
South Carolina, Medical College of; Charleston S. C. (1823)	Kenneth M. Lynch	532 C	State
South Carolina, University of; Columbia, S. C. (1801)	Donald Russell	3,280 C	State
South Carolina State College; Orangeburg, S. C. (1896) (N)	Benner C. Turner	1,170 C	State
South Dakota, University of; Vermillion, S. Dak. (1882)	I. D. Weeks	1,425 C	State
South Dakota School of Mines & Tech.; Rapid City, S. Dak. (1885)	F. L. Partlo	443 C	State
South Dakota State Coll. of A & M Arts; Brookings, S. Dak. (1881)	John W. Headley	1,877 C	State
Southeast Missouri State College; Cape Girardeau, Mo. (1873)	W. W. Parker	1,040 C	State
Southeastern Louisiana College; Hammond, La. (1925)	L. H. Dyson	970 C	State
Southeastern State College; Durant, Okla. (1909)	A. E. Shearer	1,106 C	State
Southern California, University of; Los Angeles, Calif. (1880)	Fred D. Fagg, Jr.	17,272 C	Private
Southern Illinois University; Carbondale, Ill. (1874)	Delyte W. Morris	3,400 C	State
Southern Methodist University; Dallas, Tex. (1911)	Willis Tate	4,150 C	Methodist
Southern Missionary College; Collegedale, Tenn. (1893)	Kenneth A. Wright	568 C	7th Day Adven.
Southern Oregon College of Education; Ashland, Oreg. (1926)	Elmo N. Stevenson	603 C	State
Southern State Teachers College; Springfield, S. Dak. (1897)	J. Howard Kramer	220 C	State
Southern University & A & M College; Baton Rouge, La. (1914) (N)	Felton G. Clark	2,857 C	State
Southwest Missouri State College; Springfield, Mo. (1906)	Roy Ellis	1,559 C	State
Southwest Texas State Teachers College; San Marcos, Tex. (1899)	John G. Flowers	1,500 C	State
Southwestern at Memphis; Memphis, Tenn. (1848)	Peyton N. Rhodes	482 C	Presbyterian
Southwestern College; Winfield, Kans. (1885)	C. Orville Strohl	402 C	Methodist <sup>4</sup>
Southwestern Louisiana Institute; Lafayette, La. (1898)	Joel L. Fletcher	2,566 C	State
Southwestern State College; Weatherford, Okla. (1903)	R. H. Burton	1,000 C	State
Southwestern University; Georgetown, Tex. (1840)	William C. Finch	431 C	Methodist
Spelman College; Atlanta, Ga. (1881) (N)	A. E. Manley	454 F	Baptist <sup>4</sup>



Institution, location and (date founded) <sup>1</sup>	Chief executive <sup>2</sup>	No. of students	Control <sup>3</sup>
Spring Hill College; Spring Hill, Ala. (1830).....	V. Rev. A. C. Smith.....	698 C	Catholic <sup>4</sup>
Springfield College; Springfield, Mass. (1885) <sup>11</sup> .....	Donald C. Stone.....	929 C	Private
Stanford University; Stanford, Calif. (1891).....	J. E. W. Sterling.....	6,878 C	Private
Stephen F. Austin State College; Nacogdoches, Tex. (1923).....	Paul L. Boynton.....	1,117 C	State
Stetson University; DeLand, Fla. (1883).....	J. Ollie Edmunds.....	1,214 C	Baptist <sup>4</sup>
Stevens Institute of Technology; Hoboken, N. J. (1870).....	Jess H. Davis.....	1,925 M	Private
Stout Institute; Menomonie, Wis. (1893).....	Verne C. Fryklund.....	710 C	State
Stowe Teachers College; St. Louis, Mo. (1890) (N).....	Ruth M. Harris.....	350 C	City
Suffolk University; Boston, Mass. (1906).....	Walter M. Burse.....	847 C	Private
Sul Ross State College; Alpine, Tex. (1920).....	Bryan Wildenthal.....	800 C	State
Susquehanna University; Selinsgrove, Pa. (1858).....	G. Morris Smith.....	353 C	Lutheran <sup>4</sup>
Swarthmore College; Swarthmore, Pa. (1864).....	Courtney Smith.....	891 C	Quaker <sup>4</sup>
Sweet Briar College; Sweet Briar, Va. (1901).....	Anne G. Pannell.....	456 F	Private
Syracuse University; Syracuse, N. Y. (1870).....	William P. Tolley <sup>14</sup> .....	9,371 C	Private
Talladega College; Talladega, Ala. (1867) (N) <sup>5</sup> .....	Arthur D. Gray.....	286 C	Cong. Christian <sup>4</sup>
Tampa, University of; Tampa, Fla. (1931).....	Ellwood C. Nance.....	1,027 C	Private
Tarkio College; Tarkio, Mo. (1883).....	Clyde H. Canfield.....	206 C	Presbyterian
Taylor University; Upland, Ind. (1846).....	Evan H. Bergwall.....	413 C	Private
Temple University; Philadelphia, Pa. (1884).....	Robert L. Johnson.....	12,753 C	Private
Tennessee, University of; Knoxville, Tenn. (1794).....	C. E. Brehm.....	5,202 C	State
Tennessee Agr. & Ind. State University; Nashville, Tenn. (1912)(N).....	Walter S. Davis.....	1,930 C	State
Tennessee Polytechnic Institute; Cookeville, Tenn. (1915).....	Everett Derryberry.....	1,687 C	State
Texas, A & M College of; College Station, Tex. (1876).....	David H. Morgan.....	5,537 M	State
Texas, University of; Austin, Tex. (1883).....	Logan Wilson.....	13,278 C	State
Texas Christian University; Fort Worth, Tex. (1873).....	M. E. Sadler.....	3,564 C	Disc. of Christ
Texas College; Tyler, Tex. (1894) (N).....	Dominion R. Glass.....	759 C	Col. M. E.
Texas College of Arts & Industries; Kingsville, Tex. (1925).....	Ernest H. Poteet.....	1,988 C	State
Texas Southern University; Houston, Tex. (1947) (N).....	R. O'Hara Lanier.....	2,546 C	State
Texas State College for Women; Denton, Tex. (1901).....	John A. Guinn.....	1,948 F	State
Texas Technological College; Lubbock, Tex. (1923).....	E. N. Jones.....	5,066 C	State
Texas Western College; El Paso, Tex. (1913) <sup>40</sup> .....	Wilson H. Elkins.....	2,824 C	State
Thiel College; Greenville, Pa. (1866).....	Frederic B. Irvin.....	377 C	Lutheran
Toledo, University of; Toledo, Ohio (1872).....	Asa S. Knowles.....	4,806 C	City
Transylvania College; Lexington, Ky. (1780).....	Frank A. Rose.....	425 C	Disc. of Christ <sup>4</sup>
Trinity College; Burlington, Vt. (1925).....	Mother M. Emmanuel.....	129 F	Catholic <sup>4</sup>
Trinity College; Hartford, Conn. (1823).....	Albert C. Jacobs.....	1,091 M <sup>6</sup>	Episcopalian <sup>4</sup>
Trinity College; Washington, D. C. (1877).....	Sister Mary Patrick.....	479 F	Catholic <sup>4</sup>
Trinity University; San Antonio, Tex. (1869).....	James W. Laurie.....	2,333 C	Presbyterian
Tufts College; Medford, Mass. (1852) <sup>41</sup> .....	Nils Y. Wessell.....	3,200 C	Private
Tulane University; New Orleans, La. (1834).....	Rufus C. Harris.....	5,564 Co <sup>51</sup>	Private
Tulsa, University of; Tulsa, Okla. (1894).....	Clarence I. Pontius.....	4,720 C	Presbyterian <sup>4</sup>
Tusculum College; Greeneville, Tenn. (1794).....	Raymond C. Rankin.....	206 C	Presbyterian <sup>4</sup>
Tuskegee Institute; Tuskegee Institute, Ala. (1881) (N).....	L. H. Foster.....	1,924 C	Private
Union College; Barbourville, Ky. (1879) <sup>5</sup> .....	Conway Boatman.....	458 C	Methodist
Union College; Lincoln, Nebr. (1891) <sup>5</sup> .....	H. C. Hartman.....	793 C	7th Day Adven.
Union College; Schenectady, N. Y. (1795).....	Carter Davidson.....	950 C	Private
Union University; Jackson, Tenn. (1834).....	Warren F. Jones.....	405 C	Baptist
U. S. Coast Guard Academy; New London, Conn. (1876).....	Rear Adm. A. G. Hall <sup>28</sup> .....	475 M	Federal
U. S. Merchant Marine Academy; Kings Point, N. Y. (1938).....	Rear Adm. G. McLintock <sup>28</sup> .....	600 M	Federal
U. S. Military Academy; West Point, N. Y. (1802).....	Maj. Gen. F. A. Irving <sup>28</sup> .....	2,326 M	Federal
U. S. Naval Academy; Annapolis, Md. (1845).....	Vice Adm. C. T. Joy <sup>28</sup> .....	3,416 M	Federal
U. S. Naval Postgraduate School; Monterey, Calif. (1909).....	Rear Adm. F. Moosbrugger <sup>28</sup> .....	1,010 M	Federal
Upper Iowa University; Fayette, Iowa (1857).....	Eugene E. Garbee.....	217 C	Private
Upsala College; East Orange, N. J. (1893).....	E. B. Lawson.....	1,190 C	Lutheran
Ursinus College; Collegeville, Pa. (1869).....	Norman E. McClure.....	670 C	Evan. & Ref. <sup>4</sup>
Ursuline College; Louisville, Ky. (1938).....	Mother M. Columba.....	315 F	Catholic <sup>4</sup>
Ursuline College for Women; Cleveland, Ohio (1871).....	Mother Marie Sands.....	237 F	Catholic <sup>4</sup>
Utah, University of; Salt Lake City, Utah (1850).....	Albert R. Olpin.....	6,457 C	State
Utah State Agricultural College; Logan, Utah (1888) <sup>5</sup> .....	Henry A. Dixon.....	3,821 C	State
Valdosta State College; Valdosta, Ga. (1906).....	J. Ralph Thaxton.....	352 C	State
Valparaiso University; Valparaiso, Ind. (1859).....	O. P. Kretzmann.....	1,619 C	Lutheran <sup>4</sup>
Vanderbilt University; Nashville, Tenn. (1872).....	Harvie Branscomb <sup>4</sup> .....	3,198 C	Private
Vassar College; Poughkeepsie, N. Y. (1861).....	Sarah G. Blanding.....	1,381 F	Private
Vermont, University of, & State Agr. College; Burlington, Vt. (1791).....	Carl W. Borgmann.....	2,552 C	State
Vermont State Teachers College; Castleton, Vt. (1867).....	Alden J. Carr.....	251 C	State
Vermont State Teachers College; Johnson, Vt. (1867).....	Odino A. Martinetti.....	110 C	State
Vermont State Teachers College; Lyndon Center, Vt. (1911).....	Rita L. Bole.....	125 C	State

Institution, location and (date founded) <sup>1</sup>	Chief executive <sup>2</sup>	No. of students	Control <sup>3</sup>
Villa Maria College; Erie, Pa. (1925) <sup>4</sup>	Mother M. Aurelia	165 F	Private
Villanova University; Villanova, Pa. (1842)	Rev. J. A. Donnellon	2,121 M <sup>6</sup>	Catholic <sup>4</sup>
Virginia, Medical College of; Richmond, Va. (1837)	William T. Sanger	1,427 C	State
Virginia, University of; Charlottesville, Va. (1819) <sup>23</sup>	Colgate W. Darden, Jr.	3,799 M <sup>6</sup>	State
Virginia Military Institute; Lexington, Va. (1839)	William H. Milton, Jr. <sup>28</sup>	935 M	State
Virginia Polytechnic Institute; Blacksburg, Va. (1876) <sup>25</sup>	Walter S. Newman	2,847 C	State
Virginia State College; Petersburg, Va. (1882) (N)	Robert P. Daniel	2,215 C	State
Virginia Union University; Richmond, Va. (1867) (N)	John M. Ellison	797 C	Baptist <sup>4</sup>
Wabash College; Crawfordsville, Ind. (1832)	Frank H. Sparks	486 M	Private
Wagner Lutheran College; Staten Island, N. Y. (1883)	David M. Delo	929 C	Lutheran <sup>4</sup>
Wake Forest College; Wake Forest, N. C. (1834) <sup>42</sup>	Harold W. Tribble	1,577 C	Baptist
Walla Walla College; College Place, Wash. (1892)	G. W. Bowers	828 C	7th Day Adven.
Warburg College; Waverly, Iowa (1852)	C. H. Becker	623 C	Lutheran
Washburn University; Topeka, Kans. (1865)	Bryan S. Stoffer	1,547 C	City
Washington, State College of; Pullman, Wash. (1890)	C. Clement French	4,623 C	State
Washington, University of; Seattle, Wash. (1861) <sup>11</sup>	Henry Schmitz	13,048 C	State
Washington & Jefferson College; Washington, Pa. (1780)	Boyd C. Patterson	473 M	Private
Washington & Lee University; Lexington, Va. (1749)	Francis P. Gaines	1,004 M	Private
Washington College; Chestertown, Md. (1782)	Daniel Z. Gibson	400 C	Private
Washington Missionary College; Washington, D. C. (1904)	William H. Shephard	700 C	7th Day Adven.
Washington University; St. Louis, Mo. (1853)	Ethan A. H. Shepley <sup>14</sup>	5,078 C	Private
Wayne University; Detroit, Mich. (1868)	Clarence B. Hilberry	15,333 C	Private
Waynesburg College; Waynesburg, Pa. (1849)	Paul R. Stewart	440 C	Presbyterian <sup>4</sup>
Webb Institute of Naval Architecture; Glen Cove, N. Y. (1889)	R. Adm. F. E. Haeberle <sup>43</sup>	70 M	Private
Wellesley College; Wellesley, Mass. (1870)	Margaret Clapp	1,718 F	Private
Wells College; Aurora, N. Y. (1868)	Louis J. Long	331 F	Private
Wesleyan College; Macon, Ga. (1836)	B. Joseph Martin	434 F <sup>8</sup>	Methodist
Wesleyan University; Middletown, Conn. (1831)	Victor L. Butterfield	802 M <sup>6</sup>	Private
West Liberty State College; West Liberty, W. Va. (1837)	Paul N. Elbin	756 C	State
West Texas State College; Canyon, Tex. (1910)	James P. Cornette	2,145 C	State
West Virginia Institute of Technology; Montgomery, W. Va. (1896)	William B. Axtell	432 C	State
West Virginia State College; Institute, W. Va. (1891) (N)	William J. L. Wallace	786 C	State
West Virginia University; Morgantown, W. Va. (1867)	Irvin Stewart	4,760 C	State
West Virginia Wesleyan College; Buckhannon, W. Va. (1890)	W. J. Scarborough	497 C	Methodist
Western Carolina College; Cullowhee, N. C. (1889)	Paul A. Reid	785 C	State
Western College for Women; Oxford, Ohio (1853)	Herrick B. Young	276 F	Private
Western Illinois State College; Macomb, Ill. (1899)	Frank A. Beu	1,541 C	State
Western Kentucky State College; Bowling Green, Ky. (1906)	Paul L. Garrett	1,600 C	State
Western Maryland College; Westminster, Md. (1868)	Lowell S. Ensor	582 C	Methodist <sup>4</sup>
Western Michigan College of Education; Kalamazoo, Mich. (1903)	Paul V. Sangren	4,158 C	State
Western Montana College of Education; Dillon, Mont. (1897)	Rush Jordan	221 C	State
Western Reserve University; Cleveland, Ohio (1826)	John S. Millis	4,594 C	Private
Western State College of Colorado; Gunnison, Colo. (1901)	P. P. Mickelson	691 C	State
Western Washington Coll. of Education; Bellingham, Wash. (1899)	W. W. Haggard	1,196 C	State
Westmar College; Le Mars, Iowa (1900)	D. O. Kime	477 C	Evan. Un. Breth.
Westminster College; Fulton, Mo. (1851)	William W. Hall	314 M	Presbyterian <sup>4</sup>
Westminster College; New Wilmington, Pa. (1852)	Will W. Orr	984 C	Presbyterian
Westminster College; Salt Lake City, Utah (1875)	J. Richard Palmer	280 C	Presb. & Meth. <sup>4</sup>
Wheaton College; Norton, Mass. (1834)	A. Howard Meneely	530 F	Private
Wheaton College; Wheaton, Ill. (1860)	V. Raymond Edman	1,723 C	Private
Wheelock College; Boston, Mass. (1889)	Winifred E. Bain	375 F <sup>8</sup>	Private
Whitman College; Walla Walla, Wash. (1859)	Chester C. Maxey	685 C	Private
Whittier College; Whittier, Calif. (1901)	Paul S. Smith	793 C	Quaker <sup>4</sup>
Whitworth College; Spokane, Wash. (1890)	Frank F. Warren	747 C	Presbyterian <sup>4</sup>
Wichita, Municipal University of; Wichita, Kans. (1895)	Harry F. Corbin	3,190 C	City
Wiley College; Marshall, Tex. (1873) (N) <sup>6</sup>	J. S. Scott, Sr.	663 C	Methodist
Wilkes College; Wilkes-Barre, Pa. (1947)	Eugene S. Farley	628 C	Private
William and Mary, College of; Williamsburg, Va. (1693)	A. D. Chandler	1,559 C	State
Willamette University; Salem, Oreg. (1842)	G. Herbert Smith	1,012 C	Methodist <sup>4</sup>
William Jewell College; Liberty, Mo. (1849)	Walter P. Binns	644 C	Baptist <sup>4</sup>
William Smith College. See Seneca, Colleges of the			
Williams College; Williamstown, Mass. (1793)	James P. Baxter, 3rd	1,065 M	Private
Wilmington College; Wilmington, Ohio (1871)	Samuel D. Marble	486 C	Quaker <sup>4</sup>
Wilson College; Chambersburg, Pa. (1869)	Paul S. Havens	311 F	Presbyterian <sup>4</sup>
Wilson Teachers College; Washington, D. C. (1873)	Walter E. Hager	468 C	City
Winthrop College; Rock Hill, S. C. (1886)	Henry R. Sims	1,150 F	State
Wisconsin, University of; Madison, Wis. (1849)	Edwin B. Fred	12,887 C	State
Wisconsin Institute of Technology; Platteville, Wis. (1907)	Milton A. Melcher	140 M	State
Wisconsin State College; Eau Claire, Wis. (1916)	William R. Davies	758 C	State
Wisconsin State College; La Crosse, Wis. (1909)	Rexford S. Mitchell	947 C	State

Institution, location and (date founded) <sup>1</sup>	Chief executive <sup>2</sup>	No. of students	Control <sup>3</sup>
Wisconsin State College; Milwaukee, Wis. (1880).....	J. Martin Klotsche.....	1,722 C	State
Wisconsin State College; Oshkosh, Wis. (1871).....	Forrest R. Polk.....	718 C	State
Wisconsin State College; Platteville, Wis. (1866).....	Chester O. Newlun.....	606 C	State
Wisconsin State College; River Falls, Wis. (1874).....	E. H. Kleinpell.....	660 C	State
Wisconsin State College; Stevens Point, Wis. (1894).....	William C. Hansen.....	743 C	State
Wisconsin State College; Superior, Wis. (1896).....	Jim D. Hill.....	746 C	State
Wisconsin State College; Whitewater, Wis. (1868).....	Robert C. Williams.....	693 C	State
Wittenberg College; Springfield, Ohio (1845).....	Clarence C. Stoughton.....	926 C	Lutheran
Wofford College; Spartanburg, S. C. (1854).....	Pendleton Gaines.....	612 M	Methodist
Woodstock College; Woodstock, Md. (1869).....	Rev. Joseph F. Murphy.....	330 M	Catholic
Wooster, College of; Wooster, Ohio (1866).....	Howard F. Lowry.....	992 C	Presbyterian
Worcester Polytechnic Institute; Worcester, Mass. (1865).....	Francis W. Roys <sup>13</sup> .....	694 M	Private
Wyoming University of; Laramie, Wyo. (1887).....	G. D. Humphrey.....	2,066 C	State
Xavier University; Cincinnati, Ohio (1831).....	James F. Maguire.....	2,605 M <sup>4</sup>	Catholic <sup>4</sup>
Xavier University of Louisiana; New Orleans, La. (1925) (N).....	Mother M. Agatha.....	1,051 C	Catholic <sup>4</sup>
Yale University; New Haven, Conn. (1701) <sup>11</sup> .....	A. Whitney Griswold.....	7,499 M <sup>6</sup>	Private
Yankton College; Yankton, S. Dak. (1881).....	James C. Graham.....	189 C	Congregational <sup>4</sup>
Yeshiva University; New York, N. Y. (1897).....	Samuel Belkin.....	2,500 Co	Jewish <sup>4</sup>
Youngstown College; Youngstown, Ohio (1908).....	Howard W. Jones.....	3,251 C	Private

<sup>1</sup> The letter N indicates that the school is attended predominantly by Negroes. <sup>2</sup> President unless otherwise indicated. <sup>3</sup> Controlled unless otherwise indicated. <sup>4</sup> Affiliated but not controlled. <sup>5</sup> Data applies to spring semester of 1953. <sup>6</sup> Women are admitted for special courses and/or graduate work. <sup>7</sup> Women's undergraduate school of Columbia University. <sup>8</sup> Men are admitted for special courses and/or graduate work. <sup>9</sup> Historically related to Baptist church. <sup>10</sup> Historically related to Congregational church. <sup>11</sup> Data applies to fall semester of 1953. <sup>12</sup> Pembroke is the undergraduate school for women of Brown University. <sup>13</sup> Acting president. <sup>14</sup> Chancellor. <sup>15</sup> Affiliated with Congregational, Baptist and Episcopal churches. <sup>16</sup> Rector. <sup>17</sup> Dean. <sup>18</sup> Provost. <sup>19</sup> Data applies to winter semester of 1953. <sup>20</sup> Quasi-public in control. <sup>21</sup> Fordham College is for men only. <sup>22</sup> Coeducational in p.m.; male only in the a.m. <sup>23</sup> Mary Washington College is the constituent school for women of the University of Virginia. <sup>24</sup> Acting Chancellor. <sup>25</sup> General Church of the New Jerusalem (Swedenborgian). <sup>26</sup> Rutgers College is for men only; New Jersey College for Women is for women only. Campuses at Newark and Camden are coeducational. <sup>27</sup> Date of founding as State Teachers College; founded 1855 as City Normal School. <sup>28</sup> Superintendent. <sup>29</sup> Female only at Park Ave. bldg.; coeducational at Bronx bldg. <sup>30</sup> Includes part-time students. <sup>31</sup> Newcomb College is the constituent school for women of Tulane University. <sup>32</sup> Some divisions are coeducational. <sup>33</sup> Maintained by individual Christian Scientists for the sons and daughters of Christian Scientists. <sup>34</sup> Affiliated with Harvard University. <sup>35</sup> Radford College is the women's division of Virginia Polytechnic Institute. <sup>36</sup> Schools of law and business administration are coeducational. <sup>37</sup> The engineering program is coeducational. <sup>38</sup> Controlled by Methodist, Presbyterian and Congregational churches. <sup>39</sup> Executive Vice President. <sup>40</sup> Part of the University of Texas. <sup>41</sup> Jackson College is the Dept. of Women (Lib. Arts) for Tufts College. <sup>42</sup> Construction program under way to remove college to Winston-Salem, N. C. <sup>43</sup> Administrator. <sup>44</sup> Marymount College, in New York City, a sister college, has an enrollment of 275 women. <sup>45</sup> Data applies to fall semester of 1952.

## The National Park System of the United States

Source: National Park Service.

The National Park System of the United States, administered by the National Park Service, a bureau of the Department of the Interior, embraces a total of 174 areas, containing approximately 21,866,000 acres in federal ownership. Started with the establishment of Yellowstone National Park in 1872, the system includes not only the most extraordinary and spectacular scenic exhibits in the United States proper and in Alaska and Hawaii but also a large number of sites distinguished for their historic or prehistoric importance or scientific interest. The number and extent of the various types of areas which comprise the system, as of June 30, 1954, are as follows:

Type of Area	Number	Federal Land (Acres)	Lands within exterior boundaries not federally owned (Acres)	Total lands within exterior boundaries (Acres)
National Parks.....	28	12,641,164.41	420,681.20	13,061,845.61
National Historical Parks.....	6	11,444.47	5,775.25	17,219.72
National Monuments.....	83	8,999,334.06	227,938.22	9,227,272.28
National Military Parks.....	11	24,356.33	2,550.43	26,906.76
National Memorial Parks.....	1	65,648.50	5,542.84	71,191.34
National Battlefield Parks.....	3	5,487.52	3,261.76	8,749.28
National Battlefield Sites.....	6	188.63	547.35	735.98
National Historic Sites.....	10	1,314.52	2.12	1,316.64
National Memorials.....	11	4,425.73	58.13	4,483.86
National Cemeteries.....	10	217.01	5.00	222.01
National Parkways.....	4	77,650.99	35,793.32	113,444.31
National Capital Parks <sup>1</sup> .....	1	35,091.06	1,508.24	36,599.30
Total, National Park System.....	174	21,866,323.23	703,663.86	22,569,987.09

<sup>1</sup> Includes Catoclin Recreational Demonstration Area being administered by National Capital Parks pending disposition.



## National Parks

Name; location and year established as National Park	Area in U. S. ownership, acres	Outstanding characteristics
Acadia (Maine), 1919	30,362.65	Rugged seashore on Mt. Desert Island and adjacent mainland
Big Bend (Texas), 1944	692,304.70	Mountains and desert bordering the Rio Grande
Bryce Canyon (Utah), 1928	36,010.38	Area of grotesque eroded rocks brilliantly colored
Carlsbad Caverns (N. Mex.), 1930	45,846.59	One of the world's largest known caves; spectacular flight of bats.
Crater Lake (Oregon), 1902	160,290.33	Deep blue lake in crater of inactive volcano
Everglades (Florida), 1947	1,258,591.23	Sub-tropical area with abundant bird and animal life
Glacier (Montana), 1910	999,261.93	Rocky mountains with many glaciers and lakes
Grand Canyon (Arizona), 1919	645,295.91	Mile deep gorge, 4 to 18 miles wide, 217 miles long (105 in park).
Grand Teton (Wyoming), 1929	298,153.26	Picturesque range of high mountain peaks
Great Smoky Mts. (N. C.-Tenn.), 1930	507,168.16	Highest mountain range east of Black Hills; luxuriant plant life
Hawaii (Territory Hawaii), 1916	176,950.90	Spectacular volcanic area with two active volcanoes
Hot Springs (Arkansas), 1921	1,019.13	47 mineral hot springs said to have therapeutic value
Isle Royale (Michigan), 1940	133,838.51	Largest wilderness island in Lake Superior; great moose herd
Kings Canyon (California), 1940	453,655.48	Huge canyons; high mountains; giant sequoias
Lassen Volcanic (California), 1916	104,120.68	Only recently active volcano in United States proper
Mammoth Cave (Kentucky), 1936	50,695.73	Vast limestone labyrinth with underground river
Mesa Verde (Colorado), 1906	51,017.87	Best preserved pre-historic cliff dwellings in United States
Mount McKinley (Alaska), 1917	1,939,319.04	Highest mountain in North America; spectacular wildlife
Mount Rainier (Washington), 1899	241,571.09	Greatest single-peak glacial system in United States
Olympic (Washington), 1938	888,181.75	Finest mountain wilderness of Pacific Northwest
Platt (Oklahoma), 1906	911.97	Cold mineral springs with distinctive properties
Rocky Mountain (Colorado), 1915	254,995.06	Section of the Rocky Mountains; 65 peaks over 10,000 feet
Sequoia (California), 1890	385,178.32	Groves of giant sequoias; world's largest and probably oldest living things; includes Mt. Whitney, highest mountain in U. S. proper
Shenandoah (Virginia), 1935	193,472.98	Tree covered mountains; scenic Skyline Drive
Wind Cave (South Dakota), 1903	27,885.67	Limestone caverns in Black Hills; buffalo herd
Yellowstone (Wyoming-Montana-Idaho), 1872	2,213,206.55	World's greatest geyser area; spectacular falls and canyon; one of world's great wildlife sanctuaries
Yosemite (California), 1890	757,617.48	Mountains; inspiring gorges and waterfalls; giant sequoias
Zion (Utah), 1919	94,241.06	Multicolored gorge in heart of southern Utah desert

## National Historical Parks

Name and location	Acreage in U. S. ownership
Abraham Lincoln (Kentucky)	116.50
Appomattox Court House (Va.)	968.25
Chalmette (Louisiana)	69.61
Colonial (Virginia)	7,124.48
Morristown (New Jersey)	957.96
Saratoga (New York)	2,207.67

## National Monuments

Name and location	Acreage in U. S. ownership
Ackia Battleground (Miss.)	49.15
Andrew Johnson (Tennessee)	16.33
Arches (Utah)	34,049.94
Aztec Ruins (New Mexico)	27.14
Badlands (South Dakota)	103,547.69
Bandelier (New Mexico)	27,048.89
Big Hole Battlefield (Montana)	200.00
Black Canyon of the Gunnison (Colorado)	13,176.02
Cabrillo (California)	.50
Canyon de Chelly (Arizona)	83,840.00
Capitol Reef (Utah)	33,970.61
Capulin Mountain (N. Mex.)	680.42
Casa Grande (Arizona)	472.50
Castillo de San Marcos (Fla.)	18.51
Castle Clinton (New York)	1.00
Castle Pinckney (S. C.)	3.50
Cedar Breaks (Utah)	6,172.20

## National Monuments—(cont.)

Name and location	Acreage in U. S. ownership
Chaco Canyon (New Mexico)	20,989.35
Channel Islands (California)	26,819.26
Chiricahua (Arizona)	10,480.90
Colorado (Colorado)	17,596.43
Craters of the Moon (Idaho)	48,003.86
Custer Battlefield (Montana)	765.34
Death Valley (Calif.-Nev.)	1,864,898.31
Devils Postpile (California)	798.46
Devils Tower (Wyoming)	1,193.91
Dinosaur (Utah-Colorado)	190,962.13
Effigy Mounds (Iowa)	1,204.36
El Morro (New Mexico)	880.80
Fort Frederica (Georgia)	94.40
Fort Jefferson (Florida)	47,125.00
Fort Laramie (Wyoming)	214.41
Fort Matanzas (Florida)	227.76
Fort McHenry (Maryland)	43.26
Fort Pulaski (Georgia)	5,361.62
Fort Sumter (South Carolina)	2.40
Fossil Cycad (South Dakota)	320.00
George Washington Birthplace (Virginia)	393.68
George Washington Carver (Missouri)	210.00
Gila Cliff Dwellings (N. Mex.)	160.00
Glacier Bay (Alaska)	2,297,734.10
Gran Quivira (New Mexico)	450.94

Name and location	Acreage in U. S. ownership
Grand Canyon (Arizona) .....	196,051.00
Great Sand Dunes (Colorado) .....	35,522.39
Homestead (Nebraska) .....	162.73
Hovenweep (Utah-Colorado) .....	491.34
Jewel Cave (South Dakota) .....	1,274.56
Joshua Tree (California) .....	476,152.81
Katmai (Alaska) .....	2,697,590.00
Lava Beds (California) .....	46,238.69
Lehman Caves (Nevada) .....	640.00
Meriwether Lewis (Tennessee) .....	300.00
Montezuma Castle (Arizona) ..	783.09
Mound City Group (Ohio) .....	67.50
Muir Woods (California) .....	485.18
Natural Bridges (Utah) .....	2,649.70
Navajo (Arizona) .....	360.00
Ocmulgee (Georgia) .....	683.48
Old Kasaan (Alaska) .....	38.00
Oregon Caves (Oregon) .....	480.00
Organ Pipe Cactus (Arizona) ..	328,161.73
Perry's Victory (Ohio) .....	14.25
Petrified Forest (Arizona) .....	85,303.63
Pinnacles (California) .....	12,817.77
Pipe Spring (Arizona) .....	40.00
Pipestone (Minnesota) .....	115.60
Rainbow Bridge (Utah) .....	160.00
Saguaro (Arizona) .....	54,971.50
Scotts Bluff (Nebraska) .....	2,196.44
Sitka (Alaska) .....	53.62
Statue of Liberty (New York) ..	10.38
Sunset Crater (Arizona) .....	3,040.00
Timpanogos Cave (Utah) .....	250.00
Tonto (Arizona) .....	1,120.00
Tumacacori (Arizona) .....	10.00
Tuzigoot (Arizona) .....	42.67
Verendrye (North Dakota) .....	253.04
Walnut Canyon (Arizona) .....	1,641.62
White Sands (New Mexico) .....	140,247.04
Whitman (Washington) .....	45.84
Wupatki (Arizona) .....	34,733.03
Yucca House (Colorado) .....	9.60
Zion (Utah) .....	33,920.75

## National Military Parks

Chickamauga and Chattanooga (Georgia-Tennessee) .....	8,189.64
Fort Donelson (Tennessee) .....	102.54
Fredericksburg and Spotsylvania (Virginia) .....	2,421.21
Gettysburg (Pennsylvania) .....	2,554.82
Guilford Courthouse (N. C.) ..	148.83
Kings Mountain (S. C.) .....	4,012.00
Moores Creek (North Carolina) ..	42.23
Petersburg (Virginia) .....	1,502.14
Shiloh (Tennessee) .....	3,729.26
Stones River (Tennessee) .....	323.86
Vicksburg (Mississippi) .....	1,329.80

## National Memorial Park

Theodore Roosevelt (N. Dak.) ..	65,648.50
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## National Battlefield Parks

Kennesaw Mountain (Georgia) ..	3,094.21
Manassas (Virginia) .....	1,708.87
Richmond (Virginia) .....	684.44

## National Battlefield Sites

Name and location	Acreage in U. S. ownership
Antietam (Maryland) .....	183.63
Brices Cross Roads (Mississippi) ..	1.00
Cowpens (South Carolina) .....	1.00
Fort Necessity (Pennsylvania) ..	2.00
Tupelo (Mississippi) .....	1.00
White Plains (New York) .....	0.00

## National Historic Sites

Adams (Massachusetts) .....	4.77
Federal Hall Memorial (N. Y.) ..	.45
Fort Raleigh (North Carolina) ..	18.50
Hampton (Maryland) .....	45.42
Home of Franklin D. Roosevelt (New York) .....	93.69
Hopewell Village (Pa.) .....	848.06
Jefferson National Expansion Memorial (Missouri) .....	82.58
Old Phila. Custom House (Pa.) ..	.79
Salem Maritime (Massachusetts) ..	8.61
Vanderbilt Mansion (New York) ..	211.65

## National Memorials

Coronado (Arizona) .....	2,745.33
DeSoto (Florida) .....	24.18
Fort Caroline (Florida) .....	116.38
House Where Lincoln Died (D. C.) .....	.05
Lee Mansion (Virginia) .....	2.71
Lincoln Memorial (D. C.) .....	.61
Lincoln Museum (D. C.) .....	.18
Mount Rushmore (S. Dak.) .....	1,220.32
Thomas Jefferson (D. C.) .....	1.20
Washington Monument (D. C.) ..	.37
Wright Brothers (N. C.) .....	314.40

National Cemeteries<sup>1</sup>

Antietam (Maryland) .....	11.36
Battleground (D. C.) .....	1.03
Fort Donelson (Tennessee) .....	15.34
Fredericksburg (Virginia) .....	12.00
Gettysburg (Pennsylvania) .....	15.55
Poplar Grove (Virginia) .....	8.72
Shiloh (Tennessee) .....	10.25
Stones River (Tennessee) .....	20.09
Vicksburg (Mississippi) .....	119.76
Yorktown (Virginia) .....	2.91

## National Parkways

Blue Ridge (N. C.-Va.) .....	52,480.26
George Washington Memorial (Va.-Md.) .....	3,045.95
Natchez Trace (Tenn.-Ala.-Miss.) .....	21,464.39
Suitland (Md.-D. C.) .....	660.39

## National Capital Parks

National Capital Parks (D. C.-Va.-Md.-W. Va.) .....	35,091.06 <sup>2</sup>
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<sup>1</sup> Arlington National Cemetery, in Virginia, is not shown because it is under the jurisdiction of the Department of the Army rather than of the National Park Service. <sup>2</sup> Includes 5,746.15 acres in Catocin Recreational Demonstration Area, which is administered by the National Capital Parks pending disposition.

## Museums of the United States

Source: Questionnaires to Museums.

### NEW YORK CITY

**American Academy of Arts and Letters:** 633 W. 155th St., New York 32. Open: wkdys. & Sun. during exhib. 2-5 (closed Mon.). Otherwise by appt. Free.

Painting, sculpture by members of Academy and National Institute of Arts and Letters. Winter Exhibition by candidates for Art Grants. Spring Exhibition by new members and recipients of Grants and honors. Hassam Fund purchases.

**American Museum of Natural History:** Central Park W. at 79th St., New York 24. Open: wkdys. 10-5, Sun. & hldys. 1-5. Free. Covers all branches of natural sciences except systematic botany with thorough exhibits in each field. Planetarium.

**Brooklyn Museum:** Eastern Pkwy., Brooklyn 38, N. Y. Open: wkdys. 10-5, Sun. & hldys. 1-5 (closed Xmas). Free.

European and American paintings. Egyptian collection. Art of China, Japan, India, Near East. Exhibits showing Primitive and New World cultures. American rooms. Industrial design laboratory.

**Cloisters:** Ft. Tryon Pk., New York 33. Open: wkdys. 10-5 (closed Mon.), Sun., hldys. 1-5 (May-Sept., Sun., 1-6). Free.

Cloisters, chapel, chapter house reconstructed from parts of old European structures. Frescoes, polychromed statues, stained glass, Gothic tapestries.

**Frick Collection:** 1 E. 70th St., New York 21. Open: wkdys. 10-5 (closed Mon. & mo. of Aug.), Sun. & hldys. 1-5. Free.

Paintings, watercolors, prints, drawings of 14th to 19th centuries. Italian Renaissance and French sculpture. Chinese and French porcelain. Concerts, lectures.

**Guggenheim (Solomon R.) Museum, Solomon R. Guggenheim Foundation:** 1071 5th Ave. (at 88th St.), New York 28. Open: wkdys. 10-6 (closed Mon.), Sun. 12-6. Free.

Loan shows of contemporary American, European art. Free gallery talks. Regular exhibition from museum's collection of 20th-century paintings, sculpture.

**Hispanic Society of America (Museum & Library):** Broadway bet. 155th & 156th Sts., New York 32. Museum open: wkdys. 10-4:30, Sun. 1-5 (closed Mon., July 4, Thns. Day, Xmas). Library open: wkdys. 1-4:30 (closed Sun., Mon., hldys., mo. of Aug.). Free.

Paintings, sculpture, decorative arts, manuscripts and incunabula, representative of Hispanic culture. More than 650 volumes published.

**Metropolitan Museum of Art:** 5th Ave. at 82nd St., New York 28. Open: wkdys. 10-5, Sun., hldys. 1-5. Free.

Extensive collection of European and American paintings, decorative arts, prints, Egyptian, Asiatic, Classical art.

Musical instruments, arms and armor. American period rooms. Costumes and textiles. Library. See also Cloisters.

**Museum of Modern Art:** 11 W. 53rd St., New York 19. Open: wkdys. 12-7, Sun. & hldys. 1-7. Adm. 60c (children 20c).

Founded 1929 to aid study of modern art and its application to manufacturing and practical life. Constantly changing exhibitions of contemporary painting, sculpture, photography, architecture, industrial design, films.

**Museum of the American Indian, Heye Foundation:** Broadway at 155th St., New York 32. Open: Tues.-Sat. 2-5 (closed Sun., Mon., hldys.). Free.

Archaeology and ethnology of Americas from Arctic Circle to Tierra del Fuego.

**Museum of the City of New York:** 5th Ave. at 104th St., New York 29. Open: wkdys. 10-5 (closed Mon.), Sun. 1-5, closed Xmas. Free.

History of New York City. Period costumes, furniture, miniature scenes, portraits, paintings, prints, manuscripts, silver, toys, fire engines, horse car.

**National Academy of Design:** 1083 5th Ave. (at 90th St.) New York 28. Open: wkdys. & Sun. 1-6 (during exhibitions).

Special annual exhibitions by selected organizations Oct. thru May.

**New York Historical Society:** Central Park W. at 77th St., New York 24. Open: wkdys. & Sun. 1-5, (Sat. 10-5, closed Mon., NY Day, July 4, Thns. Day, Xmas, month of Aug.). Free.

New York city and state historical exhibits. Early American paintings and portraits. Period rooms. Audubon watercolors. John Rogers statuettes.

**Roosevelt (Theodore) Museum:** 28 E. 20th St., New York 3. Open: wkdys. 10-5 (closed Mon.), Sun. & hldys. 1-5 (closed Thns. Day, Xmas, NY Day). Free.

Restored birthplace of Roosevelt. Mounted lion shot by him in Africa. Photographs, letters, trophies, personal items.

**Whitney Museum of American Art:** 22 W. 54th St., New York 19. Open: every day 1-5. Free.

Sculpture, paintings, watercolors, drawings by 20th-century American artists. Exhibitions of contemporary and historical American art.

### CHICAGO

**Art Institute of Chicago:** Michigan Ave. at Adams St., Chicago 3, Ill. Open: wkdys. 9-5, Sun. 12-5. Adm. 25c. (free Wed., Sat., Sun., hldys.).

Paintings, sculpture, prints, drawings. Oriental arts; European, American decorative arts. Thorne Miniature Rooms.



**Chicago Academy of Sciences, Museum of Natural History:** 2001 N. Clark St., Chicago 14, Ill. Open: daily 10-5. Free.

Emphasis on regional natural history. Habitat groups of existing and prehistoric animals. Study collections of North American flora and fauna.

**Chicago Historical Society:** N. Clark St. at North Ave., Chicago 14, Ill. Open: wkdays. 9:30-4:30, Sun. 12:30-5:30. Free (Sun., Mem. Day, July 4, Lab. Day 25¢.).

Exhibits and period rooms from discovery and exploration of America to present. Special emphasis on history of Chicago. Washington, Lincoln exhibits.

**Chicago Natural History Museum** (formerly Field Museum): Roosevelt Rd. at Lake Shore Dr., Chicago 5, Ill. Open: wkdays. & Sun.—Nov.—Feb. 9-4; May-Aug. 9-6; Mar., Apr., Sept., Oct. 9-5 (closed Xmas and NY Day). Adm. 25¢. (free Thurs., Sat., Sun.).

Exhibits in anthropology, botany, geology, zoology. Prehistoric skeletons. Dioramas of Stone-Age Europe. Vast Egyptian collection. Model of moon.

**Museum of Science and Industry:** 57th St. at Lake Michigan, Chicago 37, Ill. Open: fall & winter—wkdays. 9:30-4 (Sat. 9:30-5:30), Sun. & hldys. 9:30-7; spring & summer—wkdays. 9:30-5:30, Sun. & hldys. 9:30-7. Free (small fee to several exhibits).

Over 8 acres of exhibits. Working coal mine. Full-size street of 1910. Fully equipped farm and scale model railroad. Evolution of automobile, airplane and ships. Iron foundry.

**Oriental Institute of the University of Chicago:** 1155 E. 58th St., Chicago 37, Ill. Open: wkdays. 10-12, 1-5 (closed Mon.), Sun. 1-5. Free.

Representative collections of ancient Near Eastern objects, including 40-ton human-headed winged bull from Khorsabad, 16-ft. statue of Tutenkhamon from Egypt, gold ornaments from ancient Persia, ivories from Megiddo.

**Vanderpoel (John H.) Memorial Art Gallery:** Longwood Dr. at 96th St., Chicago 43, Ill. Open: wkdays. & Sun. 9-5 (closed hldys.). Free.

Paintings, watercolors, etchings, sculpture contributed by the artists in tribute to Mr. Vanderpoel.

#### WASHINGTON, D. C.

**Corcoran Gallery of Art:** 17th St. at New York Ave., N. W., Washington 6, D. C. Open: wkdays. 10-4:30 (closed Mon.; Sat. 9-4:30), Sun. & hldys. 2-5 (closed Xmas & July 4). Free.

Specializes in American art, but has notable collection of 17th century Dutch and 19th century French paintings. Persian rugs, Italian majolica, Greek and Roman antiquities. Bayre bronzes. American sculpture. Annual and special exhibitions of U. S. art.

**Freer Gallery of Art:** Jefferson Dr. at 12th St., S.W., Washington 25, D. C. Open: wkdays. & Sun. 9-4:30 (Tues. 2-10; closed Xmas). Free.

Oriental paintings, sculpture, bronzes, pottery, metalwork, manuscripts. Largest extant Whistler collection.

**National Air Museum, Smithsonian Institution:** The Mall, 10th and Jefferson Dr., Washington 25, D. C. Open: every day but Xmas 9-4:30. Free.

38 aircraft exhibited, including Wright brothers' *Kitty Hawk Flyer*, Lindbergh's *Spirit of St. Louis*, Wiley Post's *Winnie Mae*, Bell *Supersonic X-1*.

**National Collection of Fine Arts:** Constitution Ave. at 10th St., Washington 25, D. C. Open: wkdays. & Sun. 9-4:30. Free.

Art collections given by Harriet Lane Johnston, Ralph Cross Johnson, William T. Evans, John Gelliatly and others.

**National Gallery of Art:** Constitution Ave. at 6th St., Washington 25, D. C. Open: wkdays. 10-5, Sun. 2-10, closed Xmas & New Year's Day. Free.

Paintings, sculpture, drawings, prints, decorative arts given by Mellon, Kress, Widener, Rosenwald, Dale, the Booths and others. Index of American Design.

**Smithsonian Institution:** on the Mall, Washington 25, D. C. Open: wkdays. & Sun. 9-4:30. Free.

Maintains the following museums and art galleries: Freer Gallery of Art, National Air Museum, National Collection of Fine Arts, National Gallery of Art, U. S. National Museum. See those entries.

**United States National Museum, a Bureau of the Smithsonian Institution:** several bldgs. on the Mall, Washington 25, D. C. Open: wkdays. & Sun. 9-4:30. Free.

Exhibits in anthropology, biology, geology, engineering, industry, history.

#### PHILADELPHIA

**Academy of Natural Sciences of Philadelphia:** 19th and the Parkway, Philadelphia 3, Pa. Open: wkdays. 10-5 (summer 10-4), Sun. 1-5. Adm. 50c (children 25c).

Large habitat groups of animals of North America, Africa, Asia. Hall of Earth History, Audubon Bird Hall. Minerals, gems.

**Franklin Institute of the State of Pennsylvania for the Promotion of the Mechanical Arts:** 20th St. at Benj. Franklin Pkwy., Philadelphia 3, Pa. Open: wkdays. 12-5 (Sat. 10-5, closed Mon.), Sun. 12-5. Adm. 50¢.

Activities grouped into 7 major categories: Benj. Franklin Memorial; monthly Journal; lectures; library; medal awards; museum of science and industry, including planetarium; research laboratories.

**Pennsylvania Academy of the Fine Arts:** Broad and Cherry Sts., Philadelphia 2. Open: wkdays. 10-5 (closed Mon., July 4, Thinks. Day, Xmas, NY Day), Sun. & hldys. 1-5. Free.

Permanent collections include American art from 18th century to present. Special winter exhibit of painting, sculpture. Fall exhibit of water colors, prints.

**Philadelphia Museum of Art:** Parkway at 26th St., Philadelphia 30, Pa. Open: wkdys. & Sun. 9-5 (closed all legal hldys.). Free. Art from beginning of Christian era. Paintings: old masters, contemporary French, American, Mexican. Prints, decorative arts, period rooms. Architectural units. Medieval and Oriental arts.

#### MUSEUMS IN OTHER CITIES

**Alabama Museum of Natural History:** University of Alabama, Tuscaloosa. Open: wkdys. & Sun. 8-5. Free.

All phases of natural history with emphasis on geology. *See also* Mound State Monument Archaeological Museum.

**Atomic Energy, American Museum of:** Oak Ridge, Tenn. Open: wkdys. 9:30-5; Sun. 12:30-6:30. Adm. 50c (children under 12 free).

Exhibits, scale models, pictures, etc. illustrating physical breakdown of atom and uses of radioisotopes in industry, agriculture and medicine. Guided tours.

**Baseball Hall of Fame and Museum, Natl.:** Main St., Cooperstown, N. Y.

Relics, pictures, documents of baseball history. Bronze plaques of game's immortals. *See also* Hall of Fame in index.

**Berkshire Museum:** Pittsfield, Mass. Open: wkdys. 10-5 (closed Mon.), Sun. 2-5. Free. Art objects from Egyptian to modern times. Paintings and sculpture. Indian and Eskimo exhibits. Birds, animals, minerals. Original "One Horse Shay."

**(Boston) Museum of Fine Arts:** 465-479 Huntington Ave., Boston 15, Mass. Open: wkdys. 10-5 (closed Mon.), Sun. 1:30-5:30. Free.

European and American paintings. Early American silver, furniture, interiors. Print collection largest in U. S. Noted Asiatic, Egyptian, Classical collections.

**Buffalo Fine Arts Academy—Albright Art Gallery:** 1285 Elmwood Ave., Buffalo 22, N. Y. Open: wkdys. 10-5 (Mon. 2-6, Wed. 2-10), Sun. 2-6. Free.

European and American paintings, including contemporary works. Sculpture court. Small sculptures and ceramics.

**Buffalo Museum of Science:** Humboldt Park, Buffalo, N. Y. Open: wkdys. 10-5 (Sat. 9-5), Sun. & hldys. 1:30-5:30. Free. Extensive natural history collections. African and South Sea exhibits. Chinese pottery. Babylonian seals. First and rare editions of scientific monographs.

**California Academy of Sciences:** Golden Gate Park, San Francisco 18. Open: wkdys. & Sun. 10-5. Free.

North American and African habitat groups. Astronomical exhibits, clocks,

watches, minerals, plants. Steinhart Aquarium. Morrison Planetarium.

**California Palace of the Legion of Honor:** Lincoln Park, San Francisco. Open: daily 10-5 (hldys. 1-5). Free.

European and American paintings. Rodin sculpture and drawings. Furniture, bronzes, porcelain. Egyptian art.

**Carnegie Institute:** 4400 Forbes St., Pittsburgh 13, Pa. Open: wkdys. 10-5 (Tues. during winter mos. 10-10), Sun. 2-5. Free.

Department of Fine Arts: European and American paintings, ancient sculpture. Carnegie Museum: exhibits in history and natural history. Decorative and useful arts. Music Hall. Carnegie Library.

**Cincinnati Art Museum:** Eden Park, Cincinnati 6, Ohio. Open: wkdys. 10-5 (Tues. during Oct.-May 1-10), Sun. & hldys. 2-5. Free.

Paintings, prints since 15th century. Egyptian, Greco-Roman, Medieval, Oriental sculpture. Near and Far Eastern pottery, bronzes. Musical instruments, decorative arts, period rooms. Movies.

**Cleveland Museum of Art:** Wade Park, Cleveland 6, Ohio. Open: wkdys. 9-5 (Wed. 9 A.M.-10 P.M., Fri. 9-5, 7-10 Oct. thru May, closed Mon.), Sun. 1-6. Free.

Classical and modern art of all nations and ages; considerable art of Cleveland. Paintings, sculpture, graphic arts, furniture, textiles. Byzantine, Medieval, Early American collections.

**Cleveland Museum of Natural History:** 2717 Euclid Ave., Cleveland 15, Ohio. Open: wkdys. 9-5, Sun. 1-5:30. Free.

Mammals, birds, reptiles, fish, insects, plant models, minerals, gems. Most complete mastodon yet found. African collections. Spitz planetarium.

**Colorado Springs Fine Arts Center:** 30 W. Dale St., Colorado Springs, Colo. Open: wkdys. 10-5 (closed Mon. from Sept. thru May), Sun. 1:30-5. Free.

Contemporary paintings. Latin American and Southwestern folk arts and crafts. Navajo sand-painting reproductions. Frequently changing exhibitions.

**Corning Glass Center:** Corning, N. Y. Open: wkdys. & Sun. 9:30-5 (closed Mon.). Free.

Museum has most comprehensive collection of glass in world; Hall of Science and Industry shows place played by glass in everyday life.

**Currier Gallery of Art:** 192 Orange St., Manchester, N. H. Open: wkdys. 10-5, Sun. 2-5. Free.

Paintings, prints, drawings, sculpture, glass, tapestries. American furniture and decorative arts of 17th to 19th centuries.

**Davenport Public Museum:** Brady St. at 7th, Davenport, Iowa. Open: wkdys. 9-5 (closed Mon.), Sun., hldys. 2-5. Free.

Science, history, applied art exhibits,



including anthropology, ethnology, Oriental and Mediterranean culture. Art and Historical Library at 215 Main St.

**Denver Art Museum:** 5 separate branches. Administration offices: Schleier Gallery, 1343 Acoma St., Denver 4, Colo. Open wk-dys. 9-5 (Mon. 2-5, 7-9), Sun. 2-5. Free.

European, American paintings and decorative arts. Oriental, South Sea, African, Latin American, American Indian arts and crafts.

**Denver Museum of Natural History:** City Park, Denver 6. Open: wk-dys. 9-5, Sun. 12-5. Free.

Natural history of North and South America, Australia and South Pacific. Habitat groups of mammals and birds. Minerals, fossil mammal and reptile skeletons, New World archaeology.

**Detroit Historical Museum:** Woodward at Kirby, Detroit 21. Open: wk-dys. 1-10 (Sat. 9-6, closed Mon.), Sun. 1-10. Free.

1840 & 1880 walk through streets and stores, automobile and industrial exhibits, periods rooms, model railroad.

**Detroit Institute of Arts:** 5200 Woodward Ave., Detroit 2, Mich. Open: Sept.-June—wk-dys. 1-10 (Sat. 9-6, closed Mon.), Sun. 9-6; July & Aug.—wk-dys. & Sun. 9-6 (closed Mon.); closed all hldys. Free.

Survey of history as expressed in arts. Paintings, sculpture, furniture, glass, gold work, ivory, graphic arts, textiles. Large murals by Diego Rivera. Movies.

**Farmers' Museum:** Lake Rd., Route 80, Cooperstown, N. Y. Open: May 1-Nov. 1 every day 9-5. Adm. \$1.

Early farm and handicraft tools. Schoolhouse, country store, smithy, lawyer's office, print shop, doctor's office, pharmacy. Cardiff Giant. Operated by N. Y. State Historical Assn.

**Fenimore House:** Lake Rd., Route 80, Cooperstown, N. Y. Open: May 1-Nov. 1—every day 9-6; rest of yr.—wk-dys. 9-5, Sat. & Sun. 1-5. Adm. 75¢.

American portraits, genre paintings. Brower life masks of Founding Fathers. Hamilton-Burr Room. James Fenimore Cooper Collection. Folk art, Shaker collection. Library. Operated by N. Y. State Historical Assn.

**Gardner (Isabella Stewart) Museum:** 280 The Fenway, Boston 15, Mass. Open: Tues., Thurs., Sat. 10-4, Sun. 1-4 (closed other days, hldys., and during Aug.). Free (children under 8 not admitted).

Renaissance art in setting resembling Venetian palace. Painting, sculpture, tapestries, furniture. Music in Tapestry Room in afternoon of open days.

**Heard Museum:** 22 E. Monte Vista Rd., Phoenix, Ariz. Open (Nov. 1-May 1): wk-dys. 10-5 (closed Mon.), Sun. 1-5. Free.

Prehistoric and historic pottery, blankets, beadwork, carvings, weapons, etc. from various parts of world.

**Herron (John) Art Museum:** 110 E. 16th St., Indianapolis, Ind. Open: wk-dys. 9-5 (closed Mon. & hldys.), Sun. 1-6. Free.

European paintings from Renaissance to present. American paintings of 19th and 20th centuries. Egyptian, Greek, Asiatic sculpture and ceramics, Chinese bronzes, ceramics, jades.

**Huntington (Henry E.) Library and Art Gallery:** San Marino 9, Calif. Open: wk-dys. & Sun. 1-4:30 (closed Mon. and during Oct.). Free (reservations must be made).

18th century British paintings. Library of English and American history and literature. Gutenberg Bible. Franklin's autobiography in his handwriting. Botanical garden. Research facilities.

**International Folk Art, Museum of (Unit of the Museum of N. Mex.):** Off Old Pecos Rd., Santa Fe, N. Mex. Open: Mon. 7-9, Tues.-Sat. 10-5, Sun. 1-5. Free.

Collection of folk art from 50 countries. One of two such museums in world. (Other is in Sweden.)

**Layton Art Gallery:** 758 N. Jefferson St., Milwaukee 2, Wis. Open: wk-dys. 9-5 (closed Mon.), Sun. 2-5. Free.

Exhibitions of selections from permanent collections, including contemporary artists. Special exhibitions, lectures, traveling exhibits.

**Los Angeles County Museum:** Exposition Park, Los Angeles 7, Calif. Open: wk-dys. & Sun. 10-5 (closed Mon., Thns. Day, Xmas). Free.

American, European, Eastern art. American, English silver. American Indian exhibits. California History Hall. Rancho La Brea Fossils.

**Marine Historical Association, Inc.:** Mystic, Conn. Open: wk-dys. & Sun. 10-5 (closed Thns. Day, Xmas.). Adm. \$1 (children 25¢).

Reconstructed seaport of Age of Sail. Typical waterfront street, 4 vessels moored at docks, etc.

**Mint Museum of Art:** 501 Hempstead Pl., Charlotte, N. C. Open: wk-dys. 10-5 (closed Mon.), Sun. 3-5. Museum closed June 27-Sept. 8. Free.

American and European paintings and prints. Period furniture. Relics of former U. S. branch mint.

**Mound State Monument Archaeological Museum:** Moundville, Ala. Open: wk-dys & Sun. 8-5. Adm. 50¢ adults, 25¢ children.

Uncovered Indian burials, etc., of Moundville Indians. Operated by Alabama Museum of Natural History.

**Navajo Ceremonial Art, Museum of:** Camino Lejo, near old Pecos Rd., Santa Fe, N. Mex. Open: wk-dys. 9-12, 1-4:30 (closed Mon.), Sun. 3-5. Adm. 25¢ (free Sun.).

Sand paintings, ceremonial objects, baskets, blankets, silver. Music records of chants. Comparative material from Asia and elsewhere. Library.



**Nelson (William Rockhill) Gallery of Art and Atkins Museum of Fine Arts:** 4525 Oak, Kansas City 11, Mo. Open: wkdys. 10-5 (Fri. 1-5, closed Mon.), Sun. & hldys. 2-6 (closed NY Day, July 4, Thnks. Day, Xmas). Also open Fri. eves. 7-10 from Oct. 1-Apr. 30. Adm. 25c. (free Sat., Sun., hldys., Fri. eves.).

European paintings from 13th century to present. Extensive Chinese collection. Egyptian, Greek, Roman collections. English pottery. Concerts, movies.

**New York State Historical Association:** Lake Rd., Route 80, Cooperstown, N. Y.

Maintains Farmers' Museum and Fenimore House. See those entries. Also operates museum and library on Moses Circle in village of Ticonderoga.

**Newark Museum:** 43-49 Washington St., Newark 1, N. J. Open: Oct.-June-wkdys. 12-5:30 (Wed. & Thur. 12-5:30, 7-9:30), Sun. & hldys. 2-6; July-Sept.-wkdys. 12-5, Sun. & most hldys. 2-6. Free.

American painting, sculpture, emphasizing contemporary. Tibetan collection. Glass, ceramics, bronzes, jewelry. Free planetarium performances. Exhibits in mechanical models, astronomy, natural science, anthropology.

**Ringling (John & Mable) museums:** Sarasota, Fla. Museum of Art, John Ringling Residence, Museum of the American Circus open wkdys. 9-4:30, Sun. 12:30-4:30. Closed Xmas and Labor Day. Adm: Art Museum \$1; Residence (incl. Circus Museum), \$1.50; Circus Museum, 50¢; general admission, \$2.

Collection of old masters and 18th-century theater in Art Museum. Elaborate furnishings in Residence. Illustrative and historical material in Circus Museum.

**Rosierucian Egyptian, Oriental Museum:** San Jose, Calif. Open: wkdys. 9-5 (Sat. 1-5), Sun. 12-5. Free.

Egyptian and Oriental antiquities. Mummies, statuary, jewelry, utensils, clothing. Reproductions of Egyptian rock tomb and temple. Art gallery.

**(St. Louis) City Art Museum:** Forest Park, St. Louis 5, Mo. Open: wkdys. & Sun. 10-5 (Mon. 2:30-9:30). Free.

Collection covers all fields of fine art: painting, sculpture, graphic art, decorative art, period rooms.

**San Diego, Fine Arts Gallery of:** Plaza de Panama, Balboa Park, San Diego, Calif. Open: wkdys. 10-5 (closed Mon.), Sun. 1-5:30. Free.

European, American paintings, 14th century to present, with emphasis on Spanish, Italian art. Asiatic arts and prints.

**San Diego Museum of Man:** California Quadrangle, Balboa Park, San Diego, Calif. Open: wkdys. 10-5 (closed Tues.), Sun. 1-5. Free.

Exhibits on Egypt; primitive weapons; Choco, North American, San Diego County Indians; Mayan archaeology.

**San Diego Society of Natural History—Natural History Museum:** San Diego, Calif. Open: wkdys. & Sun. 10-4:30 (closed Xmas, NY Day). Free.

Mammals, birds, fossils, shells, plants, insects, minerals. Emphasis on Southwestern U. S., Sonora, Lower California.

**San Francisco Museum of Art:** War Memorial Bldg., San Francisco, Calif. Open: wkdys. 12-10, Sun. 1-5. Free.

Contemporary European, American paintings, sculpture, drawings, prints, architecture, photographs, decorative arts, including work by San Francisco artists. 40-50 exhibitions annually. Concerts, movies, library.

**Southwest Museum, Inc.:** Marmion Way at Museum Dr., Highland Pk., Los Angeles 42, Calif. Open: wkdys. & Sun. 1-5 (closed Mon., Xmas, July 4). Free.

American Indian exhibits, ancient and modern. Library, lectures. Casa de Adobe, reproduction of adobe hacienda, located at 4605 N. Figueroa St.

**Toledo Museum of Art:** Monroe at Scottwood, Toledo 2, Ohio. Open: wkdys. 9-5 (Mon. 1-5), Sun. hldys. 1-5. Free.

Dutch, French, English, American paintings. Old Masters. Prints, manuscripts, sculpture. Ancient, modern glass. Oriental, Egyptian art. Library, concerts.

**Virginia Museum of Fine Arts:** Boulevard at Grove Ave., Richmond 20. Open: wkdys. 11-5 (Fri. in winter 2-5, 8-10; closed Mon.), Sun. 2-5. Free Wed., Sat., Sun. (other days 30c).

European, American, Oriental, Pacific Island art. Special collections: modern French, American paintings, Russian Crown Jewels. Educational programs.

**Wadsworth Atheneum:** 25 Atheneum Sq., N., Hartford 3, Conn. Open: wkdys. 12-5 (Sat. 9-5, closed Mon., Gd. Fri., July 4, Labor Day, Thnks. Day, Xmas, NY Day), Sun. 2-5. Free.

European and American paintings and drawings from 1400 to present. Bronzes, porcelain, silver. American period rooms and furniture. Library, concerts, movies.

**Walters Art Gallery:** Charles and Centre Sts., Baltimore 1, Md. Open: wkdys. 11-5 (July-Aug. 11-4) (Mon., Oct.-May, 1:30-5, 7:30-9:30), Sun. & hldys. 2-5 (closed NY Day, July 4, Thnks. Day, Xmas Eve, Xmas). Free.

Art from ancient empires to 19th century Europe. Important collections of Etruscan art and medieval illuminated books.

**Worcester Art Museum:** 55 Salisbury St., Worcester 9, Mass. Open: wkdys. 10-5 (Tues. in Nov.-Apr. 10-10), Sun. 2-5, hldys. 2-5 (closed July 4, Thnks. Day, Xmas). Free.

Art from Egyptian to modern times, including Far East. Emphasis on painting and sculpture. Classes, lectures, concerts, films. Professional art school.

## HOW A PRESIDENT IS ELECTED

### Selection of Delegates

**F**IRST, AT FULL DRESS MEETINGS several months before, the national committees decide the time and place of the conventions. Before the conventions meet, each party selects delegates from every state and territory.

Democrats allow 2 delegates with 1 vote apiece for each Senator, or 4 delegates with  $\frac{1}{2}$  vote apiece. Two delegates are allowed for each Congressman. Also, a bonus vote of 4 is allowed each state that went Democratic in 1948. These states may elect 8 delegates with  $\frac{1}{2}$  vote each. Six delegates each are allowed to Puerto Rico, D. C., Alaska, and Hawaii, and 2 each to the Canal Zone and the Virgin Islands.

Republicans allow each state 4 delegates-at-large and 2 for each Representative-at-large, as well as 6 additional delegates if the state went Republican in the previous Presidential election or, in that election or a subsequent one held prior to the next Republican National Convention, elects a Republican U. S. Senator or Governor. In addition, each Congressional district within the state that cast 2,000 Republican votes at the last election is permitted a delegate, with an additional delegate if that district cast 10,000 votes. Republicans further allow 4 delegates-at-large for Alaska, 6 each for D. C. and Hawaii, and 4 additional for Hawaii if the Delegate to Congress elected at the last preceding election is a Republican. There are 3 delegates-at-large from Puerto Rico, 1 from the Virgin Islands.

Each party provides for the selection of an equal number of alternates to serve in the absence of regular delegates. Delegates are chosen differently in different states, mostly by party primary but in some cases by party conventions.

### The Conventions

At each convention a temporary chairman is chosen, usually to deliver the party's keynote speech. After a credentials committee seats the various delegates, a permanent chairman is elected. The convention then votes on a platform, drawn up by the platform committee.

By the third or fourth day, Presidential nominations begin. The chairman calls the roll of states alphabetically. A state may place a candidate in nomination or yield to another state.

Voting, again alphabetically by voice vote, begins after all nominations have been made and seconded. A simple majority is required in each party, although this may require many ballots.

Finally, the Vice Presidential candidate is selected. Although there is no law saying that the candidates *must* come from different states, it is practically necessary

for this to be the case. Otherwise, according to the Constitution (see Amendment XII), electors from that state could vote for only one of the candidates and would have to cast their other vote for some person of another state. This could result in the awkward situation of a Presidential candidate's receiving a majority electoral vote and his running mate's failing to.

### The Electoral College

The next step in the process is the nomination of electors in each state, according to its laws. These electors must not be Federal office holders. In the November election, the voters cast their votes for electors, not for President. In some states, the ballots include only the names of the Presidential and Vice Presidential candidates; in others, they include only names of the electors. Nowadays, it is rare for electors to be split between parties. The last such occurrence was in Tennessee in 1948; the last before that, in West Virginia in 1916. On three occasions (1824, 1876 and 1888), the candidate with the largest popular vote failed to obtain an electoral-vote majority.

Each state has as many electors as it has United States Senators and members of the House of Representatives. There are 96 Senators and 435 Representatives, a total of 531 electoral votes, of which 266 are needed to win.

On the first Monday after the second Wednesday in December, the electors cast their votes in their respective state capitols. Constitutionally they may vote for someone other than the party candidate but practically they cannot since they are pledged to one party and its candidate on the ballot. Should the Presidential or Vice-Presidential candidate die between the November election and the December meetings, the electors pledged to vote for him could vote for whomever they pleased. However, it seems certain that the national committee would attempt to get an agreement among the state party leaders for a replacement candidate.

The votes of the electors, certified by the states, are sent to Congress, where the president of the Senate opens the certificates and has them counted in the presence of both Houses on January 6. The new President is inaugurated at noon on January 20.

Should no candidate receive a majority of the electoral vote for President, the House of Representatives chooses a President from among the three highest candidates, voting, not as individuals, but as states, with a majority (now 25) needed to elect. Should no Vice Presidential candidate obtain the majority, the Senate, voting as individuals, chooses from the highest two.

## U. S. National Conventions Since 1856

Date	Party	Where held	Nominated	Vote
June 17, 1856	R	Philadelphia	John C. Frémont	520
June 2, 1856	D	Cincinnati	James Buchanan	296
May 16, 1860	R	Chicago	Abraham Lincoln	364
April 23, 1860	D	Charleston & Baltimore	S. A. Douglas	181
June 7, 1864	R <sup>1</sup>	Baltimore	Abraham Lincoln	Unanimous
Aug. 29, 1864	D	Chicago	Geo. B. McClellan	202½
May 20, 1868	R	Chicago	U. S. Grant	Unanimous
July 4, 1868	D	New York City	Horatio Seymour	Unanimous
June 5, 1872	R	Philadelphia	U. S. Grant	Unanimous
June 9, 1872	D	Baltimore	Horace Greeley	688
June 14, 1876	R	Cincinnati	R. B. Hayes	384
June 28, 1876	D	St. Louis	S. J. Tilden	508
June 2, 1880	R	Chicago	J. A. Garfield	399
June 23, 1880	D	Cincinnati	W. S. Hancock	705
June 3, 1884	R	Chicago	J. G. Blaine	541
July 11, 1884	D	Chicago	Grover Cleveland	683
June 19, 1888	R	Chicago	Benjamin Harrison	544
June 6, 1888	D	St. Louis	Grover Cleveland	By acclamation
June 7, 1892	R	Minneapolis	Benjamin Harrison	535⅓
June 21, 1892	D	Chicago	Grover Cleveland	617½
June 16, 1896	R	St. Louis	William McKinley	661½
July 7, 1896	D	Chicago	William J. Bryan	500
June 19, 1900	R	Philadelphia	William McKinley	Unanimous
July 4, 1900	D	Kansas City	William J. Bryan	By acclamation
June 21, 1904	R	Chicago	Theodore Roosevelt	Unanimous
July 6, 1904	D	St. Louis	Alton B. Parker	678
June 16, 1908	R	Chicago	William H. Taft	702
July 7, 1908	D	Denver	William J. Bryan	892½
June 18, 1912	R	Chicago	William H. Taft	561
June 25, 1912	D	Baltimore	Woodrow Wilson	990
June 7, 1916	R	Chicago	Charles E. Hughes	949½
June 14, 1916	R	St. Louis	Woodrow Wilson	By acclamation
June 8, 1920	R	Chicago	Warren G. Harding	692⅓
June 28, 1920	D	San Francisco	James M. Cox	732½
June 10, 1924	R	Cleveland	Calvin Coolidge	1,065
June 24, 1924 <sup>2</sup>	D	New York City	John W. Davis	839 <sup>3</sup>
June 12, 1928	R	Kansas City	Herbert Hoover	837
June 26, 1928	D	Houston	Alfred E. Smith	849½
June 14, 1932	R	Chicago	Herbert Hoover	1,126½
June 27, 1932	D	Chicago	F. D. Roosevelt	945
June 9, 1936	R	Cleveland	Alfred M. Landon	984
June 23, 1936	D	Philadelphia	F. D. Roosevelt	By acclamation
June 24, 1940	R	Philadelphia	Wendell L. Willkie	Unanimous
July 15, 1940	D	Chicago	F. D. Roosevelt	Unanimous
June 26, 1944	R	Chicago	Thomas E. Dewey	1,056
July 19, 1944	D	Chicago	F. D. Roosevelt	1,086-90
June 21, 1948	R	Philadelphia	Thomas E. Dewey	1,094-0
July 12, 1948	D	Philadelphia	Harry S. Truman	947½-263½
July 17, 1948	( <sup>4</sup> )	Birmingham	J. Strom Thurmond	By acclamation
July 22, 1948	P	Philadelphia	Henry A. Wallace	By acclamation
July 7, 1952	R	Chicago	Dwight D. Eisenhower	845-361
July 21, 1952	D	Chicago	Adlai E. Stevenson	By acclamation

<sup>1</sup> The Convention adopted the name Union party so as to attract War Democrats and others favoring prosecution of the war. <sup>2</sup> In session until July 10, 1924. <sup>3</sup> Nominated on 103d ballot. <sup>4</sup> States' Rights delegates from 13 Southern states.

## Presidential Succession

The following is the order of the succession to the Presidency. No person may become President, however, unless he is eligible under the Constitution.

1. Vice President of the U. S.
2. Speaker of the House.
3. President pro tempore of the Senate.
4. Secretary of State.

5. Secretary of the Treasury.
6. Secretary of Defense.
7. Attorney General.
8. Postmaster General.
9. Secretary of the Interior.
10. Secretary of Agriculture.
11. Secretary of Commerce.
12. Secretary of Labor.



# Presidential Elections, 1789 to 1952

Year	Presidential candidates	Party	Electoral vote	Year	Presidential candidates	Party	Electoral vote
1789 <sup>1,2</sup>	George Washington	(no party)	69	1796 <sup>1</sup>	John Adams	Federalist	71
	John Adams	(no party)	34		Thomas Jefferson	Dem.-Rep.	68
	Scattering	(no party)	35		Thomas Pinckney	Federalist	59
	Votes not cast		8		Aaron Burr	Dem.-Rep.	30
1792 <sup>1</sup>	George Washington	Federalist	132	1800 <sup>1,3</sup>	Scattering		48
	John Adams	Federalist	77		Thomas Jefferson	Dem.-Rep.	73
	George Clinton	Anti-Federalist	50		Aaron Burr	Dem.-Rep.	73
	Thomas Jefferson	Anti-Federalist	4		John Adams	Federalist	65
	Aaron Burr	Anti-Federalist	1		Charles C. Pinckney	Federalist	64
	Votes not cast		6		John Jay	Federalist	1

<sup>1</sup> For the original method of electing the President and the Vice President, see Article II, Section 1, of the Constitution. <sup>2</sup> Only 10 states participated in the election. The New York legislature chose no electors, and North Carolina and Rhode Island had not yet ratified the Constitution. <sup>3</sup> As Jefferson and Burr were tied, the House of Representatives chose the President. In a vote by states, 10 votes were cast for Jefferson, 4 for Burr; 2 votes were not cast.

Year	Presidential candidates	Party	Electoral vote	Vice-presidential candidates	Party	Electoral vote
1804 <sup>1</sup>	Thomas Jefferson	Dem.-Rep.	162	George Clinton	Dem.-Rep.	162
	Charles C. Pinckney	Federalist	14	Rufus King	Federalist	14
1808	James Madison	Dem.-Rep.	122	George Clinton	Dem.-Rep.	113
	Charles C. Pinckney	Federalist	47	Rufus King	Federalist	47
	George Clinton	Dem.-Rep.	6	John Langdon	Ind. (no party)	9
	Votes not cast		1	James Madison	Dem.-Rep.	3
1812	James Madison	Dem.-Rep.	128	James Monroe	Dem.-Rep.	3
	De Witt Clinton	Federalist	89	Votes not cast		1
	Votes not cast		1	Elbridge Gerry	Dem.-Rep.	131
1816	James Monroe	Dem.-Rep.	183	Elbridge Gerry	Federalist	86
	Rufus King	Federalist	34	Votes not cast		1
	Votes not cast		4	Daniel D. Tompkins	Dem.-Rep.	183
				John E. Howard	Federalist	22
1820	James Monroe	Dem.-Rep.	231	James Ross	Ind. (no party)	5
	John Quincy Adams	Ind. (no party)	1	John Marshall	Federalist	4
	Votes not cast		3	Robert G. Harper	Ind. (no party)	3
				Votes not cast		4
				Daniel D. Tompkins	Dem.-Rep.	218
				Richard Stockton	Ind. (no party)	8
1824 <sup>2</sup>	John Quincy Adams	(no party)	84	Daniel Rodney	Ind. (no party)	4
	Andrew Jackson	(no party)	99	Richard Rush	Ind. (no party)	1
	William H. Crawford	(no party)	41	Robert G. Harper	Ind. (no party)	1
	Henry Clay	(no party)	37	Votes not cast		3
				John C. Calhoun	(no party)	182
				Nathan Sanford	(no party)	30
1828	Andrew Jackson	Democratic	178	Nathaniel Macon	(no party)	24
	John Quincy Adams	Natl. Rep.	83	Andrew Jackson	(no party)	13
				Martin Van Buren	(no party)	9
1832				Henry Clay	(no party)	2
	Andrew Jackson	Democratic	219	Votes not cast		1
	Henry Clay	Natl. Rep.	49	John C. Calhoun	Democratic	171
	John Floyd	Ind. (no party)	11	Richard Rush	Natl. Rep.	83
	William Wirt <sup>3</sup>	Antimasonic	7	William Smith	Democratic	7
	Votes not cast		2	Martin Van Buren	Democratic	189
1836				John Sergeant	Natl. Rep.	49
	Martin Van Buren	Democratic	170	Henry Lee	Ind. (no party)	11
	William H. Harrison	Whig	73	Amos Ellmaker	Antimasonic	7
	Hugh L. White	Whig	26	William Wilkins	Ind. (no party)	30
	Daniel Webster	Whig	14	Votes not cast		2
	W. P. Mangum	Ind. (no party)	11	Richard M. Johnson <sup>4</sup>	Democratic	147
1840				Francis Granger	Whig	77
	William H. Harrison <sup>5</sup>	Whig	234	John Tyler	Democratic	47
	Martin Van Buren	Democratic	60	William Smith	Ind. (no party)	23
				John Tyler	Whig	234
				Richard M. Johnson	Democratic	48
				L. W. Tazewell	Ind. (no party)	11
				James K. Polk	Democratic	1

Year	Presidential candidates	Party	Electoral vote	Vice-presidential candidates	Party	Electoral vote
1844	James K. Polk	Democratic	170	George M. Dallas	Democratic	170
	Henry Clay	Whig	105	Theo. Frelinghuysen	Whig	105
1848	Zachary Taylor <sup>6</sup>	Whig	163	Millard Fillmore	Whig	163
	Lewis Cass	Democratic	127	William O. Butler	Democratic	127
1852	Franklin Pierce	Democratic	254	William R. King	Democratic	254
	Winfield Scott	Whig	42	William A. Graham	Whig	42
1856	James Buchanan	Democratic	174	John C. Breckinridge	Democratic	174
	John C. Frémont	Republican	114	William L. Dayton	Republican	114
	Millard Fillmore	American <sup>7</sup>	8	A. J. Donelson	American <sup>7</sup>	8
1860	Abraham Lincoln	Republican	180	Hannibal Hamlin	Republican	180
	John C. Breckinridge	Democratic	72	Joseph Lane	Democratic	72
	John Bell	Const. Union	39	Edward Everett	Const. Union	39
	Stephen A. Douglas	Democratic	12	H. V. Johnson	Democratic	12
1864	Abraham Lincoln <sup>8</sup>	Union <sup>10</sup>	212	Andrew Johnson	Union <sup>10</sup>	212
	George B. McClellan	Democratic	21	G. H. Pendleton	Democratic	21
1868	Ulysses S. Grant	Republican	214	Schuyler Colfax	Republican	214
	Horatio Seymour	Democratic	80	Francis P. Blair, Jr.	Democratic	80
	Votes not counted <sup>9</sup>		23	Votes not counted <sup>9</sup>		23

<sup>1</sup> The first election in which the electors voted for President and Vice President on separate ballots. (See Amendment XII to the Constitution.) <sup>2</sup> As no candidate had an electoral-vote majority, the House of Representatives chose the President from the first three. In a vote by states, 13 votes were cast for Adams, 7 for Jackson, and 4 for Crawford. <sup>3</sup> The Antislavery party on Sept. 26, 1831, was the first party to hold a nominating convention to choose candidates for President and Vice President. <sup>4</sup> As Johnson did not have an electoral-vote majority, the Senate chose him 33-14 over Granger, the others being legally out of the race. <sup>5</sup> Harrison died Apr. 4, 1841, and Tyler succeeded him Apr. 6. <sup>6</sup> Taylor died July 9, 1850, and Fillmore succeeded him July 10. <sup>7</sup> Also known as the Know-Nothing party. <sup>8</sup> Lincoln died Apr. 15, 1865, and Johnson succeeded him the same day. <sup>9</sup> 23 Southern electoral votes were excluded. <sup>10</sup> Name adopted by the Republican National Convention of 1864. Johnson was a War Democrat.

Year	Presidential candidates	Party	Electoral vote	Popular vote <sup>1</sup>	Vice-presidential candidates and party
1872	Ulysses S. Grant	Republican	286	3,597,132	Henry Wilson—R
	Horace Greeley	Dem., Liberal Rep.	(?)	2,834,125	B. Gratz Brown—D, LR—(47)
	Thomas A. Hendricks	Democratic	42		Scattering—(19)
	B. Gratz Brown	Dem., Liberal Rep.	18		Votes not counted—(14)
	Charles J. Jenkins	Democratic	2		
	David Davis	Democratic	1		
	Votes not counted		17		
1876 <sup>3</sup>	Rutherford B. Hayes	Republican	185	4,033,768	William A. Wheeler—R
	Samuel J. Tilden	Democratic	184	4,285,992	Thomas A. Hendricks—D
	Peter Cooper	Greenback	0	81,737	Samuel F. Cary—G
1880	James A. Garfield <sup>4</sup>	Republican	214	4,449,053	Chester A. Arthur—R
	Winfield S. Hancock	Democratic	155	4,442,035	William H. English—D
	James B. Weaver	Greenback	0	308,578	B. J. Chambers—G
1884	Grover Cleveland	Democratic	219	4,911,017	Thomas A. Hendricks—D
	James G. Blaine	Republican	182	4,848,334	John A. Logan—R
	Benjamin F. Butler	Greenback	0	175,370	A. M. West—G
	John P. St. John	Prohibition	0	150,369	William Daniel—P
1888	Benjamin Harrison	Republican	233	5,440,216	Levi P. Morton—R
	Grover Cleveland	Democratic	168	5,538,233	A. G. Thurman—D
	Clinton B. Fisk	Prohibition	0	249,506	John A. Brooks—P
	Alson J. Streeter	Union Labor	0	146,935	Charles E. Cunningham—UL
1892	Grover Cleveland	Democratic	277	5,556,918	Adlai E. Stevenson—D
	Benjamin Harrison	Republican	145	5,176,108	Whitelaw Reid—R
	James B. Weaver	People's <sup>5</sup>	22	1,041,028	James G. Field—Peo
	John Bidwell	Prohibition	0	264,133	James B. Cranfill—P
1896	William McKinley	Republican	271	7,035,638	Garret A. Hobart—R
	William J. Bryan	Dem., People's <sup>5</sup>	176	6,467,946	Arthur Sewall—D—(149)
	John M. Palmer	Natl. Dem.	0	133,148	Thomas E. Watson—Peo—(27)
	Joshua Levering	Prohibition	0	132,007	Simon B. Buckner—ND
					Hale Johnson—P
1900	William McKinley <sup>6</sup>	Republican	292	7,219,530	Theodore Roosevelt—R
	William J. Bryan	Dem., People's <sup>5</sup>	155	6,358,571	Adlai E. Stevenson—D, Peo
	John G. Woolley	Prohibition	0	208,914	Henry B. Metcalf—P
	Eugene V. Debs	Social Democratic	0	94,768	Job Harriman—SD

Year	Presidential candidates	Party	Electoral vote	Popular vote <sup>1</sup>	Vice-presidential candidates and party
1904	Theodore Roosevelt	Republican	336	7,628,834	Charles W. Fairbanks—R
	Alton B. Parker	Democratic	140	5,084,491	Henry G. Davis—D
	Eugene V. Debs	Socialist	0	402,400	Benjamin Hanford—S
	Silas C. Swallow	Prohibition	0	258,536	George W. Carroll—P
	Thomas E. Watson	People's	0	117,183	Thomas H. Tibbles—Peo
1908	William H. Taft	Republican	321	7,679,006	James S. Sherman—R
	William J. Bryan	Democratic	162	6,409,106	John W. Kern—D
	Eugene V. Debs	Socialist	0	420,820	Benjamin Hanford—S
	Eugene W. Chafin	Prohibition	0	253,840	Aaron S. Watkins—P
	Thomas L. Hisgen	Independence	0	82,872	John T. Graves—I
1912	Woodrow Wilson	Democratic	435	6,286,214	Thomas R. Marshall—D
	Theodore Roosevelt	Progressive	88	4,126,020	Hiram Johnson—Prog
	William H. Taft	Republican	8	3,483,922	Nicholas M. Butler—R <sup>7</sup>
	Eugene V. Debs	Socialist	0	897,011	Emil Seidel—S
	Eugene W. Chafin	Prohibition	0	206,275	Aaron S. Watkins—P
1916	Woodrow Wilson	Democratic	277	9,129,606	Thomas R. Marshall—D
	Charles E. Hughes	Republican	254	8,538,221	Charles W. Fairbanks—R
	A. L. Benson	Socialist	0	585,113	G. R. Kirkpatrick—S
	J. Frank Hanly	Prohibition	0	220,506	Ira Landrieth—P
1920	Warren G. Harding <sup>8</sup>	Republican	404	16,152,200	Calvin Coolidge—R
	James M. Cox	Democratic	127	9,147,353	Franklin D. Roosevelt—D
	Eugene V. Debs	Socialist	0	917,799	Seymour Stedman—S
	P. P. Christensen	Farmer-Labor	0	265,411	Max S. Hayes—FL
	Aaron S. Watkins	Prohibition	0	189,408	D. Leigh Colvin—P
1924	Calvin Coolidge	Republican	382	15,725,016	Charles G. Dawes—R
	John W. Davis	Democratic	136	8,385,586	Charles W. Bryan—D
	Robert M. LaFollette	Progressive, Socialist	13	4,822,856	Burton K. Wheeler—Prog S
1928	Herbert Hoover	Republican	444	21,392,190	Charles Curtis—R
	Alfred E. Smith	Democratic	87	15,016,443	Joseph T. Robinson—D
	Norman Thomas	Socialist	0	267,420	James H. Maurer—S
1932	Franklin D. Roosevelt	Democratic	472	22,821,857	John N. Garner—D
	Herbert Hoover	Republican	59	15,761,841	Charles Curtis—R
	Norman Thomas	Socialist	0	884,781	James H. Maurer—S
	William Z. Foster	Communist	0	102,991	James W. Ford—C
	William D. Upshaw	Prohibition	0	81,869	Frank S. Regan—P
1936	Franklin D. Roosevelt	Democratic	523	27,751,597	John N. Garner—D
	Alfred M. Landon	Republican	8	16,679,583	Frank Knox—R
	William Lemke	Union	0	882,479	Thomas C. O'Brien—U
	Norman Thomas	Socialist	0	187,720	George Nelson—S
	Earl Browder	Communist	0	80,159	James W. Ford—C
1940	Franklin D. Roosevelt	Democratic	449	27,244,160	Henry A. Wallace—D
	Wendell L. Willkie	Republican	82	22,305,198	Charles L. McNary—R
	Norman Thomas	Socialist	0	100,264	Maynard C. Krueger—S
1944	Franklin D. Roosevelt <sup>9</sup>	Democratic	432	25,602,504	Harry S. Truman—D
	Thomas E. Dewey	Republican	99	22,006,285	John W. Bricker—R
	Norman Thomas	Socialist	0	80,426	Darlington Hoopes—S
1948	Harry S. Truman	Democratic	303	24,105,695	Alben W. Barkley—D
	Thomas E. Dewey	Republican	189	21,969,170	Earl Warren—R
	J. Strom Thurmond	States' Rights Dem.	39	1,169,021	Fieilding L. Wright—SR
	Henry A. Wallace	Progressive	0	1,156,103	Glen Taylor—Prog
	Norman Thomas	Socialist	0	139,009	Tucker P. Smith—S
	Claude A. Watson	Prohibition	0	103,216	Dale Learn—Proh
1952	Dwight D. Eisenhower	Republican	442	33,824,351	Richard M. Nixon—R
	Adlai E. Stevenson	Democratic	89	27,314,987	John J. Sparkman—D
	Vincent W. Hallinan	Progressive	0	132,608	Charlotta A. Bass—Prog

<sup>1</sup> For those candidates receiving over 75,000 votes. <sup>2</sup> Greeley died Nov. 29, 1872, before his 68 electors voted. In the electoral balloting for President, 63 of Greeley's votes were scattered among Hendricks, Brown, Jenkins and Davis; the other 3, included in "Votes not counted," were cast for Greeley by electors from Georgia. This was the first election in which every state chose its electors by popular vote. <sup>3</sup> After the voting of the electoral college, Tilden had 184 undisputed votes, and Hayes 163. However, 22 other votes were in doubt, because two sets of electoral ballots were received from South Carolina, Louisiana, Florida and Oregon. For each of the three Southern states, one set was completely Democratic, the other completely Republican. For Oregon, one set gave all 3 of the state's votes to Hayes, the other gave one of the votes to Tilden. To settle the dispute, Congress created an Electoral Commission on Jan. 29, 1877. This Commission, consisting of 5 Supreme Court Justices, 5 senators and 5 representatives (8 Republicans and 7 Democrats), gave the 22 votes in question to Hayes. <sup>4</sup> Garfield died Sept. 19, 1881, and Arthur succeeded him Sept. 20. <sup>5</sup> The members of the People's party were known as Populists. <sup>6</sup> McKinley died Sept. 14, 1901, and Roosevelt succeeded him. <sup>7</sup> James S. Sherman, Republican candidate for Vice President, died Oct. 30, 1912, and the Republican electoral votes were cast for Butler. <sup>8</sup> Harding died Aug. 2, 1923, and Coolidge succeeded him Aug. 3. <sup>9</sup> Roosevelt died Apr. 12, 1945, and Truman succeeded him the same day.



## Presidential Election of 1928

*Source: Secretaries of State of the several states from records filed with the House of Representatives.*

### CANDIDATES FOR PRESIDENT AND VICE PRESIDENT:

**Republican**—Herbert Hoover, California; Charles Curtis, Kansas.

**Democratic**—Alfred E. Smith, New York; Joseph T. Robinson, Arkansas.

**Socialist**—Norman Thomas, New York; James H. Maurer, Pennsylvania.

**Socialist Labor**—Verne L. Reynolds, New York; Jeremiah D. Crowley, New York.

**Prohibition**—William F. Varney, New York; James A. Edgerton, Virginia.

**Workers**—William Z. Foster, Illinois; Benjamin Gitlow, New York.

State	Total	Rep.	Dem.	Plur.	Electoral		Soc.	Soc. Lab.*	Prohib.	Others†
					R	D				
Alabama.....	248,982	120,725	127,797	7,072 D	..	12	460	.....	.....	.....
Arizona.....	91,254	52,533	38,537	13,996 R	3	..	.....	.....	.....	184
Arkansas.....	197,693	77,751	119,196	41,445 D	..	9	429	.....	.....	317
California.....	1,796,656	1,162,323	614,365	547,958 R	13	..	19,595	.....	.....	373
Colorado.....	392,242	253,872	133,131	120,741 R	6	..	3,472	.....	.....	1,767
Connecticut.....	553,031	296,614	252,040	44,574 R	7	..	3,019	622	.....	736
Delaware.....	105,891	68,860	36,643	32,217 R	3	..	329	.....	.....	59
Florida.....	253,674	144,168	101,764	42,404 R	6	..	4,036	.....	.....	3,706
Georgia.....	229,159	63,498	129,602	66,104 D	..	14	124	.....	.....	35,935
Idaho.....	154,230	99,848	53,074	46,774 R	4	..	1,308	.....	.....	.....
Illinois.....	3,107,489	1,769,141	1,313,817	455,324 R	29	..	19,138	1,812	.....	3,581
Indiana.....	1,421,314	848,290	562,691	285,599 R	15	..	3,871	645	5,496	321
Iowa.....	1,009,362	623,818	378,936	244,882 R	13	..	2,960	230	.....	3,418
Kansas.....	713,200	513,672	193,003	320,669 R	10	..	6,205	.....	.....	320
Kentucky.....	940,604	558,064	381,070	176,994 R	13	..	837	340	.....	293
Louisiana.....	215,833	51,160	164,655	113,495 D	..	10	.....	.....	.....	18
Maine.....	262,171	179,923	81,179	98,744 R	6	..	1,068	.....	.....	1
Maryland.....	528,348	301,479	223,626	77,853 R	8	..	1,701	906	.....	636
Massachusetts.....	1,577,827	775,566	792,758	17,192 D	..	18	6,262	773	.....	2,468
Michigan.....	1,372,082	965,396	396,762	568,634 R	15	..	3,516	799	2,728	2,881
Minnesota.....	970,976	560,977	396,451	164,526 R	12	..	6,774	1,921	.....	4,853
Mississippi.....	151,692	27,153	124,539	97,386 D	..	10	.....	.....	.....	.....
Missouri.....	1,500,721	834,080	662,562	171,518 R	18	..	3,739	340	.....	.....
Montana.....	194,108	113,300	78,758	34,722 R	4	..	1,667	.....	.....	563
Nebraska.....	547,138	345,745	197,959	147,786 R	8	..	3,434	.....	.....	.....
Nevada.....	32,417	18,327	14,090	4,237 R	3	..	.....	.....	.....	.....
New Hampshire.....	196,747	115,404	80,715	34,689 R	4	..	455	.....	.....	173
New Jersey.....	1,549,381	926,050	616,517	309,533 R	14	..	4,897	500	160	1,257
New Mexico.....	118,014	69,645	48,211	21,434 R	3	..	.....	.....	.....	158
New York.....	4,466,072	2,193,344	2,089,863	103,481 R	45	..	107,332	4,211	.....	71,322
North Carolina.....	636,070	348,992	287,078	61,914 R	12	..	.....	.....	.....	.....
North Dakota.....	239,867	131,441	106,648	24,793 R	5	..	842	.....	.....	936
Ohio.....	2,508,346	1,627,546	864,210	763,336 R	24	..	8,683	1,515	3,556	2,836
Oklahoma.....	618,427	394,046	219,174	174,872 R	10	..	3,924	.....	.....	1,283
Oregon.....	319,942	205,341	109,223	96,118 R	5	..	2,720	1,564	.....	1,094
Pennsylvania.....	3,150,615	2,955,382	1,067,586	987,796 R	38	..	18,647	380	3,880	4,740
Rhode Island.....	242,784	117,522	118,973	1,451 D	..	5	.....	416	.....	5,873
South Carolina.....	68,605	3,188	62,700	59,512 D	..	9	47	.....	.....	2,670
South Dakota.....	261,865	157,603	102,660	54,943 R	5	..	443	.....	.....	1,159
Tennessee.....	363,473	195,388	167,343	28,045 R	12	..	631	.....	.....	111
Texas.....	708,999	367,036	341,032	26,004 R	20	..	722	.....	.....	209
Utah.....	176,604	94,618	80,985	13,633 R	4	..	954	.....	.....	47
Vermont.....	135,191	90,404	44,440	45,964 R	4	..	.....	.....	338	9
Virginia.....	305,358	164,609	140,146	24,463 R	12	..	250	180	.....	173
Washington.....	500,840	335,844	156,772	179,072 R	7	..	2,615	4,068	.....	1,541
West Virginia.....	642,752	375,551	263,784	111,767 R	8	..	1,313	.....	1,703	401
Wisconsin.....	1,016,872	544,205	450,259	93,946 R	13	..	18,213	381	2,245	1,569
Wyoming.....	84,496	52,748	29,299	23,449 R	3	..	788	.....	.....	1,661
Total.....	36,879,414	21,392,190	15,016,443	6,375,747 R	444	87	267,420	21,603	20,106	161,652

\* Labor party in Maryland; Industrial party in Minnesota; Industrialist party in Pennsylvania.

† Breakdown of other votes: Workers 48,770; Anti-Smith 38,541; Farmer-Labor 6,390; void or scattering votes 60,700; blank or defective ballots 7,251.

# Presidential Election of 1932

## CANDIDATES FOR PRESIDENT AND VICE PRESIDENT:

Democratic—Franklin D. Roosevelt, New York; John N. Garner, Texas.

Republican—Herbert Hoover, California; Charles Curtis, Kansas.

Socialist—Norman Thomas, New York; James H. Maurer, Pennsylvania.

Socialist Labor—Verne L. Reynolds, New York; John W. Aiken, Massachusetts.

Prohibition—William D. Upshaw, Georgia; Frank S. Regan, Illinois.

Communist—William Z. Foster, Illinois; James W. Ford, New York.

Liberty—W. H. Harvey, Arkansas; F. B. Hemenway, Washington.

State	Total	Dem.	Rep.	Plur.	Electoral	D	R	Soc.	Soc. Lab.*	Prohib.	Others†
Alabama	245,034	207,910	34,675	173,235	D	11	..	2,030	..	13	406
Arizona	118,251	79,264	36,104	43,160	D	3	..	2,618	..	..	265
Arkansas	220,562	189,602	28,467	161,135	D	9	..	1,269	..	..	1,224
California	2,266,972	1,324,157	847,902	476,255	D	22	..	63,299	..	20,637	10,977
Colorado	457,696	250,877	189,617	61,260	D	6	..	13,591	427	1,928	1,256
Connecticut	594,207	281,632	288,420	6,788	R	..	8	20,480	2,287	..	1,388
Delaware	112,901	54,319	57,073	2,754	R	..	3	1,376	..	..	133
Florida	276,252	206,307	69,170	137,137	D	7	..	775	..	..	..
Georgia	255,590	234,118	19,863	214,255	D	12	..	461	..	1,125	23
Idaho	186,520	109,479	71,312	38,167	D	4	..	526	..	..	5,203
Illinois	3,407,926	1,882,304	1,432,756	449,548	D	29	..	67,258	3,638	6,388	15,582
Indiana	1,576,927	862,054	677,184	184,870	D	14	..	21,388	2,070	10,399	3,832
Iowa	1,036,687	598,019	414,433	183,586	D	11	..	20,467	..	2,111	1,657
Kansas	791,978	424,204	349,498	74,706	D	9	..	18,276	..	..	..
Kentucky	983,063	580,574	394,716	185,858	D	11	..	3,853	1,396	2,252	272
Louisiana	268,804	249,418	18,853	230,565	D	10	..	..	..	..	533
Maine	298,444	128,907	166,631	37,724	R	..	5	2,489	255	..	162
Maryland	511,054	314,314	184,184	130,130	D	8	..	10,489	1,036	..	1,031
Massachusetts	1,580,114	800,148	736,959	63,189	D	17	..	34,305	2,668	1,142	4,892
Michigan	1,664,628	871,700	739,894	131,806	D	19	..	39,205	1,401	2,893	9,535
Minnesota	1,002,843	600,806	363,959	236,847	D	11	..	25,476	..	..	12,602
Mississippi	146,034	140,168	5,180	134,988	D	9	..	686	..	..	..
Missouri	1,609,894	1,025,406	564,713	460,693	D	15	..	16,374	404	2,429	568
Montana	216,479	127,286	78,078	49,208	D	4	..	7,891	..	..	3,224
Nebraska	570,135	359,082	201,177	157,905	D	7	..	9,876	..	..	..
Nevada	41,430	28,756	12,674	16,082	D	3	..	..	..	..	..
New Hampshire	205,520	100,680	103,629	2,949	R	..	4	947	..	..	264
New Jersey	1,630,063	806,630	775,684	30,946	D	16	..	42,998	1,062	774	2,915
New Mexico	151,606	95,089	54,217	40,872	D	3	..	1,776	..	..	524
New York	4,753,698	2,534,959	1,937,963	596,996	D	47	..	177,397	10,339	..	93,040
North Carolina	711,501	497,566	208,344	289,222	D	13	..	5,591	..	..	..
North Dakota	256,290	178,350	71,772	106,578	D	4	..	3,521	..	..	2,647
Ohio	2,610,088	1,301,695	1,227,679	74,016	D	26	..	64,094	1,968	7,421	7,231
Oklahoma	704,633	516,468	188,165	328,303	D	11	..	..	..	..	..
Oregon	368,751	213,871	136,019	77,852	D	5	..	15,450	1,730	..	1,681
Pennsylvania	2,859,002	1,295,948	1,453,540	157,592	R	..	36	91,119	659	11,319	6,417
Rhode Island	266,170	146,604	115,266	31,338	D	4	..	3,138	433	183	546
South Carolina	104,407	102,347	1,978	100,469	D	8	..	82	..	..	..
South Dakota	288,438	183,515	99,212	84,303	D	4	..	1,551	..	463	3,697
Tennessee	390,638	259,817	126,806	133,011	D	11	..	1,786	..	1,995	234
Texas	863,426	760,348	97,959	662,389	D	23	..	4,450	..	..	669
Utah	206,579	116,750	84,795	31,955	D	4	..	4,087	..	..	947
Vermont	136,980	56,266	78,984	22,718	R	..	3	1,533	..	..	197
Virginia	297,942	203,979	89,637	114,342	D	11	..	2,382	..	1,843	101
Washington	614,814	353,260	208,645	144,615	D	8	..	17,080	1,009	1,540	33,280
West Virginia	743,774	405,124	330,731	74,393	D	8	..	5,133	..	2,342	444
Wisconsin	1,114,815	707,410	347,741	359,669	D	12	..	53,379	494	2,672	3,119
Wyoming	96,962	54,370	39,583	14,787	D	3	..	2,829	..	..	180
Totals	39,816,522	22,821,857	15,761,841	7,060,016	D	472	59	884,781	33,276	81,869	232,898

\* Industrialist party in Pennsylvania.

† Breakdown of other votes: Communist 102,991; Liberty 53,425; Farmer-Labor 7,309; National 1,645; Industrialist (Minn.) 770; Jobless 725; Independent 533; Jacksonian 104; void or scattering 65,396.

# Presidential Election of 1936

## CANDIDATES FOR PRESIDENT AND VICE PRESIDENT:

Democratic—Franklin D. Roosevelt, New York; John N. Garner, Texas.

Republican—Alfred M. Landon, Kansas; Frank Knox, Illinois.

Socialist—Norman Thomas, New York; George Nelson, Wisconsin.

Prohibition—D. Leigh Colvin, New York; Claude A. Watson, California.

Communist—Earl Browder, Kansas; James W. Ford, New York.

Union—William Lemke, North Dakota; Thomas C. O'Brien, Massachusetts.

Socialist Labor—John W. Aiken, Massachusetts; Emil F. Teichert, New York.

State	Total	Dem.	Rep.	Plur.	Electoral		Soc.	Prohib.	Comm.	Others*	
					D	R					
Alabama.....	275,744	238,196	35,358	202 838	D	11	242	719	678	551	
Arizona.....	124,163	86,722	33,433	53,289	D	3	317	384	.....	3,307	
Arkansas.....	179,423	146,765	32,039	114,726	D	9	446	.....	169	4	
California.....	2,638,882	1,766,836	836,431	930,405	D	22	11,331	12,917	10,877	490	
Colorado.....	488,676	295,021	181,267	113,754	D	6	1,593	.....	497	10,298	
Connecticut.....	690,783	382,189	278,685	103,504	D	8	5,683	.....	1,193	23,033	
Delaware.....	127,603	69,702	54,014	15,688	D	3	172	.....	51	3,664	
Florida.....	327,365	249,117	78,248	170,869	D	7	.....	.....	.....	.....	
Georgia.....	293,178	255,364	36,942	218,422	D	12	68	663	.....	141	
Idaho.....	199,623	125,683	66,256	59,427	D	4	.....	.....	.....	7,684	
Illinois.....	3,956,522	2,282,999	1,570,393	712,606	D	29	7,530	3,439	801	91,360	
Indiana.....	1,650,897	934,974	691,570	243,404	D	14	3,856	.....	1,090	19,407	
Iowa.....	1,142,733	621,756	487,977	133,779	D	11	1,373	1,182	506	29,939	
Kansas.....	865,013	464,520	397,727	66,793	D	9	2,766	.....	.....	.....	
Kentucky.....	926,206	541,944	369,702	172,242	D	11	632	929	204	12,795	
Louisiana.....	329,778	292,894	36,791	256,103	D	10	.....	.....	.....	93	
Maine.....	304,240	126,333	168,823	42,490	R	5	783	334	257	7,710	
Maryland.....	624,896	389,612	231,435	158,177	D	8	1,629	.....	915	1,305	
Massachusetts.....	1,840,357	942,716	768,613	174,103	D	17	5,111	1,032	2,930	119,955	
Michigan.....	1,805,093	1,016,794	699,733	317,061	D	19	8,208	579†	3,384	76,395	
Minnesota.....	1,129,975	698,811	350,461	348,350	D	11	2,872	.....	2,574	75,257	
Mississippi.....	162,090	157,318	4,443	152,875	D	9	329	.....	.....	.....	
Missouri.....	1,828,635	1,111,043	697,891	413,152	D	15	3,454	908	417	14,922	
Montana.....	230,512	159,690	63,598	96,092	D	4	1,066	224	385	5,549	
Nebraska.....	608,032	347,454	247,731	100,323	D	7	.....	.....	.....	12,847	
Nevada.....	43,848	31,925	11,923	20,002	D	3	.....	.....	.....	.....	
New Hampshire.....	218,114	108,460	104,642	3,798	D	4	.....	.....	193	4,819	
New Jersey.....	1,820,437	1,083,850	720,322	363,528	D	16	3,931	926	1,639	9,769	
New Mexico.....	168,920	105,838	61,710	44,128	D	3	343	62	43	924	
New York.....	5,596,398	3,293,222‡	2,180,670	1,112,552	D	47	86,897	.....	35,609	.....	
North Carolina.....	839,462	616,141	223,283	392,858	D	13	21	.....	11	6	
North Dakota.....	273,716	163,148	72,751	90,397	D	4	552	197	360	36,708	
Ohio.....	3,012,425	1,747,122	1,127,709	619,413	D	26	117	.....	5,251	132,226	
Oklahoma.....	749,740	501,069	245,122	255,947	D	11	2,221	1,328	.....	.....	
Oregon.....	414,021	266,733	122,706	144,027	D	5	2,143	4	104	22,331	
Pennsylvania.....	4,138,105	2,353,788	1,690,300	663,488	D	36	14,375	6,691	4,060	68,891	
Rhode Island.....	311,149	165,233	125,012	40,221	D	4	.....	.....	411	20,493	
South Carolina.....	115,437	113,791	1,646	112,145	D	8	.....	.....	.....	.....	
South Dakota.....	296,452	160,137	125,977	34,160	D	4	.....	.....	.....	10,388	
Tennessee.....	475,531	327,083	146,516	180,567	D	11	685	632	319	296	
Texas.....	843,482	734,485	103,874	630,611	D	23	1,075	514	253	3,281	
Utah.....	216,677	150,246	64,555	85,691	D	4	432	43	280	1,121	
Vermont.....	143,689	62,124	81,023	18,899	R	3	.....	.....	405	137	
Virginia.....	334,590	234,980	98,336	136,644	D	11	313	594	98	269	
Washington.....	692,338	459,579	206,892	252,687	D	8	3,496	1,041	1,907	19,423	
West Virginia.....	830,073	502,582	325,486	177,096	D	8	832	1,173	.....	.....	
Wisconsin.....	1,258,712	802,984	380,828	422,156	D	12	10,626	1,071	2,197	61,006	
Wyoming.....	103,382	62,624	38,739	23,885	D	3	200	75	91	1,653	
Total.....	45,647,117	27,751,597	16,679,583	10,797,090	D	523	8	187,720	37,661	80,159	910,397

\* Breakdown of other votes: Union (including Royal Oak, Independent, and Third) 882,479; Socialist Labor (including Labor, Industrial, and Independent Labor) 12,802; National Union for Social Justice 9,407; Independent Republican 3,222; Christian 1,598; scattering 889.

† Commonwealth votes.

‡ Includes 274,924 American Labor votes.



# Presidential Election of 1940

## CANDIDATES FOR PRESIDENT AND VICE PRESIDENT:

Democratic—Franklin D. Roosevelt, New York; Henry A. Wallace, Iowa.

Republican—Wendell L. Willkie, New York; Charles L. McNary, Oregon.

Socialist—Norman Thomas, New York; Maynard C. Krueger, Illinois.

Prohibition—Roger W. Babson, Massachusetts; Edgar V. Moorman, Illinois.

Communist—Earl Browder, Kansas; James W. Ford, New York.

Socialist Labor—John W. Aiken, Massachusetts; Aaron M. Orange, New York.

State	Electoral										
	Total	Dem.	Rep.	Plur.	D	R	Soc.	Prohib.	Comm.	Others*	
Alabama.....	294,219	250,726	42,184	208,542	D	11	..	100	700	509	.....
Arizona.....	150,039	95,267	54,030	41,237	D	3	..	.....	742	.....	.....
Arkansas.....	201,838	158,622	42,122	116,500	D	9	..	301	793	.....	.....
California.....	3,268,791	1,877,618	1,351,419	526,199	D	22	..	.....	9,400	13,586	16,768
Colorado.....	549,004	265,554	279,576	14,022	R	..	6	1,899	1,597	378	.....
Connecticut.....	781,502	417,621	361,819†	55,802	D	8	..	.....	.....	1,091	971
Delaware.....	136,374	74,599	61,440	13,159	D	3	..	115	220	.....	.....
Florida.....	485,492	359,334	126,158	233,176	D	7	..	.....	.....	.....	.....
Georgia.....	312,553	265,194	23,934	241,260	D	12	..	.....	983	.....	22,442
Idaho.....	235,168	127,842	106,553	21,289	D	4	..	497	.....	276	.....
Illinois.....	4,217,935	2,149,934	2,047,240	102,694	D	29	..	10,914	9,190	.....	657
Indiana.....	1,782,747	874,063	899,466	25,403	R	..	14	2,075	6,437	.....	706
Iowa.....	1,215,430	578,800	632,370	53,570	R	..	11	.....	2,284	1,524	452
Kansas.....	860,297	364,725	489,169	124,444	R	..	9	2,447	4,056	.....	.....
Kentucky.....	970,063	557,222	410,384	146,838	D	11	..	1,014	1,443	.....	.....
Louisiana.....	372,305	319,751	52,446	267,305	D	10	..	.....	.....	.....	108
Maine.....	320,840	156,478	163,951	7,473	R	..	5	.....	.....	411	.....
Maryland.....	660,104	384,546	269,534	115,012	D	8	..	4,093	.....	1,274	657
Massachusetts.....	2,026,993	1,076,522	939,700	136,822	D	17	..	4,091	1,370	3,806	1,504
Michigan.....	2,085,929	1,032,991	1,039,917	6,926	R	..	19	7,593	1,795	2,834	799
Minnesota.....	1,251,188	644,196	596,274	47,922	D	11	..	5,454	.....	2,711	2,553
Mississippi.....	175,824	168,267	2,814	165,453	D	9	..	193	.....	.....	4,550
Missouri.....	1,833,729	958,476	871,009	87,467	D	15	..	2,226	1,809	.....	209
Montana.....	247,873	145,698	99,579	46,119	D	4	..	1,443	664	489	.....
Nebraska.....	615,878	263,677	352,201	88,524	R	..	7	.....	.....	.....	.....
Nevada.....	53,174	31,945	21,229	10,716	D	3	..	.....	.....	.....	.....
New Hampshire.....	235,419	125,292	110,127	15,165	D	4	..	.....	.....	.....	.....
New Jersey.....	1,974,920	1,016,442	945,478	70,964	D	16	..	2,637	872	8,836	455
New Mexico.....	183,014	103,699	79,315	24,384	D	3	..	.....	.....	.....	.....
New York.....	6,301,596	3,251,918†	3,027,478	224,440	D	47	..	18,950	3,250	.....	.....
North Carolina.....	822,648	609,015	213,633	395,382	D	13	..	.....	.....	.....	.....
North Dakota.....	280,775	124,036	154,590	30,554	R	..	4	1,279	325	.....	545
Ohio.....	3,319,912	1,733,139	1,586,773	146,366	D	26	..	.....	.....	.....	.....
Oklahoma.....	826,212	474,313	348,872	125,441	D	11	..	.....	3,027	.....	.....
Oregon.....	481,240	258,415	219,555	38,860	D	5	..	398	154	191	2,527
Pennsylvania.....	4,078,714	2,171,035	1,889,848	281,187	D	36	..	10,967	.....	4,519	2,345
Rhode Island.....	321,148	182,182	138,653	43,529	D	4	..	.....	74	239	.....
South Carolina.....	99,830	95,470	1,727	93,743	D	8	..	.....	.....	.....	2,633
South Dakota.....	308,427	131,362	177,065	45,703	R	..	4	.....	.....	.....	.....
Tennessee.....	522,823	351,601	169,153	182,448	D	11	..	463	1,606	.....	.....
Texas.....	1,041,168	840,151	199,152	640,999	D	23	..	728	925	212	.....
Utah.....	247,819	154,277	93,151	61,126	D	4	..	200	.....	191	.....
Vermont.....	143,062	64,269	78,371	14,102	R	..	3	.....	.....	411	11
Virginia.....	346,607	235,961	109,361	126,598	D	11	..	282	882	71	48
Washington.....	793,833	462,145	322,123	140,022	D	8	..	4,586	1,686	2,626	667
West Virginia.....	868,076	495,662	372,414	123,248	D	8	..	.....	.....	.....	.....
Wisconsin.....	1,405,540	704,821	679,206	25,615	D	12	..	15,071	2,148	2,394	1,900
Wyoming.....	112,240	59,287	52,633	6,654	D	3	..	148	172	.....	.....
Total.....	49,820,312	27,244,160	22,305,198	4,938,962	D	449	82	100,264	58,604	48,579	63,507

\* Breakdown of other votes: Independent Democrat 22,428; Progressive 16,506; Socialist Labor 10,164; Independent Republican 4,550; Industrial 2,553; Jeffersonian Democrat 2,496; Industrial Government 1,518; Labor Party of Maryland 657; Alfred Knutson 545; Republican (Tolbert Faction) 137; scattering 1,953.

† Includes 798 Union votes.

‡ Includes 417,418 American Labor votes.

## Presidential Election of 1944

### CANDIDATES FOR PRESIDENT AND VICE PRESIDENT:

**Democratic**—Franklin D. Roosevelt, New York; Harry S. Truman, Missouri.

**Republican**—Thomas E. Dewey, New York; John W. Bricker, Ohio.

**Socialist**—Norman Thomas, New York; Darlington Hoopes, Pennsylvania.

**Prohibition**—Claude A. Watson, California; Andrew Johnson, Kentucky.

**Socialist Labor**\*—Edward A. Teichert, Pennsylvania; Aria A. Albaugh, Ohio.

State	Total	Dem.	Rep.	Plur.	Electoral		D	R	Soc.	Prohib.	Soc. Lab.	Others†
Alabama.....	244,743	198,918	44,540	154,378 D	11	..	190	1,095	.....	.....	.....	.....
Arizona.....	137,634	80,926	56,287	24,639 D	4	..	.....	421	.....	.....	.....	.....
Arkansas.....	212,956	148,965	63,551	85,414 D	9	..	440	.....	.....	.....	.....	.....
California.....	3,520,875	1,988,564	1,512,965	475,599 D	25	..	3,923	14,770	327	326	.....	.....
Colorado.....	505,039	234,331	268,731	34,400 R	..	6	1,977	.....	.....	.....	.....	.....
Connecticut.....	831,990	435,146	390,527	44,619 D	8	..	5,097	.....	1,220	.....	.....	.....
Delaware.....	125,361	68,166	56,747	11,419 D	3	..	154	294	.....	.....	.....	.....
Florida.....	482,592	339,377	143,215	196,162 D	8	..	.....	.....	.....	.....	.....	.....
Georgia.....	328,109	268,187	56,507	211,680 D	12	..	6	36	.....	.....	.....	3,373
Idaho.....	208,321	107,399	100,137	7,262 D	4	..	282	503	.....	.....	.....	.....
Illinois.....	4,036,061	2,079,479	1,939,314	140,165 D	28	..	180	7,411	9,677	.....	.....	.....
Indiana.....	1,672,091	781,403	875,891	94,488 R	..	13	2,223	12,574	.....	.....	.....	.....
Iowa.....	1,052,599	499,876	547,267	47,391 R	..	10	1,511	3,752	193	.....	.....	.....
Kansas.....	733,776	287,458	442,096	154,638 R	..	8	1,613	2,609	.....	.....	.....	.....
Kentucky.....	867,921	472,589	392,448	80,141 D	11	..	535	2,023	326	.....	.....	.....
Louisiana.....	349,383	281,564	67,750	213,814 D	10	..	.....	.....	.....	.....	.....	69
Maine.....	296,400	140,631	155,434	14,803 R	..	5	.....	.....	335	.....	.....	.....
Maryland.....	608,439	315,490	292,949	22,541 D	8	..	.....	.....	.....	.....	.....	.....
Massachusetts.....	1,960,665	1,035,296	921,350	113,946 D	16	..	.....	973	2,780	266	.....	.....
Michigan.....	2,205,223	1,106,899	1,084,423	22,476 D	19	..	4,598	6,503	1,264	1,536	.....	.....
Minnesota.....	1,125,529	589,864	527,416	62,448 D	11	..	5,073	.....	3,176	.....	.....	.....
Mississippi.....	180,080	158,515	3,742	154,773 D	9	..	.....	.....	.....	17,823	.....	.....
Missouri.....	1,571,677	807,356	761,175	46,181 D	15	..	1,751	1,175	220	.....	.....	.....
Montana.....	207,355	112,556	93,163	19,393 D	4	..	1,296	340	.....	.....	.....	.....
Nebraska.....	563,126	233,246	329,880	96,634 R	..	6	.....	.....	.....	.....	.....	.....
Nevada.....	54,234	29,623	24,611	5,012 D	3	..	.....	.....	.....	.....	.....	.....
New Hampshire.....	229,625	119,663	109,916	9,747 D	4	..	46	.....	.....	.....	.....	.....
New Jersey.....	1,963,761	987,874	961,335	26,539 D	16	..	3,358	4,255	6,939	.....	.....	.....
New Mexico.....	152,225	81,389	70,688	10,701 D	4	..	.....	148	.....	.....	.....	.....
New York.....	6,316,790	3,304,238†	2,987,647	316,591 D	47	..	10,553	.....	14,352	.....	.....	.....
North Carolina.....	790,554	527,399	263,155	264,244 D	14	..	.....	.....	.....	.....	.....	.....
North Dakota.....	220,171	100,144	118,535	18,391 R	..	4	943	549	.....	.....	.....	.....
Ohio.....	3,153,056	1,570,763	1,582,293	11,530 R	..	25	.....	.....	.....	.....	.....	.....
Oklahoma.....	722,636	401,549	319,424	82,125 D	10	..	.....	1,663	.....	.....	.....	.....
Oregon.....	480,147	248,635	225,365	23,270 D	6	..	3,785	2,362	.....	.....	.....	.....
Pennsylvania.....	3,794,793	1,940,479	1,835,054	105,425 D	35	..	11,721	5,750	1,789	.....	.....	.....
Rhode Island.....	299,276	175,356	123,487	51,869 D	4	..	.....	433	.....	.....	.....	.....
South Carolina.....	103,375	90,601	4,547	86,054 D	8	..	.....	365	.....	7,862	.....	.....
South Dakota.....	232,076	96,711	135,365	38,654 R	..	4	.....	.....	.....	.....	.....	.....
Tennessee.....	510,692	308,707	200,311	108,396 D	12	..	792	882	.....	.....	.....	.....
Texas.....	1,150,326	821,605	191,425	630,180 D	23	..	593	1,013	.....	135,690	.....	.....
Utah.....	248,319	150,088	97,891	52,197 D	4	..	340	.....	.....	.....	.....	.....
Vermont.....	125,361	53,820	71,527	17,707 R	..	3	.....	.....	.....	.....	.....	14
Virginia.....	388,485	242,276	145,243	97,033 D	11	..	417	459	90	.....	.....	.....
Washington.....	856,328	486,774	361,689	125,085 D	8	..	3,824	2,396	1,645	.....	.....	.....
West Virginia.....	715,596	392,777	322,819	69,958 D	8	..	.....	.....	.....	.....	.....	.....
Wisconsin.....	1,339,152	650,413	674,532	24,119 R	..	12	13,205	.....	1,002	.....	.....	.....
Wyoming.....	101,340	49,419	51,921	2,502 R	..	3	.....	.....	.....	.....	.....	.....
Total.....	47,976,263	25,602,504	22,006,285	3,596,219 D	432	99	80,426	74,754	45,335	166,959	.....	.....

\* Industrial Government candidates in Minnesota, New York and Pennsylvania.

† Breakdown of other votes: Texas Regulars 135,439; Regular Democrat 9,964; Independent Republican 7,859; Southern Democrat 7,799; Independent Democrat 3,873; America First 1,781; Republican (Tolbert Faction) 63; scattering 681.

‡ Includes 496,405 American Labor and 329,235 Liberal votes.

# Presidential Election of 1948

## CANDIDATES FOR PRESIDENT AND VICE PRESIDENT

Democratic—Harry S. Truman, Missouri; Alben Barkley, Kentucky.  
 Republican—Thomas E. Dewey, New York; Earl Warren, California.  
 States' Rights Democratic—J. Strom Thurmond, South Carolina; Fielding L. Wright, Mississippi.  
 Progressive<sup>1</sup>—Henry A. Wallace, Iowa; Glen H. Taylor, Idaho.  
 Socialist—Norman Thomas, New York; Tucker P. Smith, Michigan.  
 Prohibition—Claude A. Watson, California; Dale Learn, Pennsylvania.  
 Socialist Labor<sup>2</sup>—Edward A. Teichert, Pennsylvania; Stephen Emery, New York.

State	Total	Dem:	Rep:	SR Dem:	Plur:	Electoral			Prog. <sup>1</sup>	Others <sup>3</sup>
						D	R	S		
Alabama.....	214,980	(*)	40,930	171,443	130,513 S	..	..	11	1,522	1,085
Arizona.....	177,065	95,251	77,597	.....	17,654 D	4	..	..	3,310	907
Arkansas.....	242,475	149,659	50,959	40,068	98,700 D	9	..	..	751	1,038
California.....	4,021,538	1,913,134	1,895,269	* 1,228 <sup>6</sup>	17,865 D	25	..	..	190,381	21,526
Colorado.....	515,237	267,288	239,714	.....	27,574 D	6	..	..	6,115	2,120
Connecticut.....	883,518	423,297	437,754	.....	14,457 R	..	8	..	13,713	8,754
Delaware.....	139,073	67,813	69,588	.....	1,775 R	..	3	..	1,050	622
Florida.....	577,643	281,988	194,280	89,755	87,708 D	8	..	..	11,620	.....
Georgia.....	418,760	254,646	76,691	85,055	169,591 D	12	..	..	1,636	732
Idaho.....	214,816	107,370	101,514	.....	5,856 D	4	..	..	4,972	960
Illinois.....	3,984,046	1,994,715	1,961,103	.....	33,612 D	28	..	..	.....	28,228
Indiana.....	1,656,214	807,833	821,079	.....	13,246 R	..	13	..	9,649	17,653
Iowa.....	1,038,264	522,380	494,018	.....	28,362 D	10	..	..	12,125	9,741
Kansas.....	788,819	351,902	423,039	.....	71,137 R	..	8	..	4,603	9,275
Kentucky.....	822,658	466,756	341,210	10,411	125,546 D	11	..	..	1,567	2,714
Louisiana.....	416,326	136,344	72,657	204,290	67,946 S	..	10	..	3,035	.....
Maine.....	264,787	111,916	150,234	.....	38,318 R	..	5	..	1,884	753
Maryland.....	596,735	286,521	294,814	2,476 <sup>6</sup>	8,293 R	..	8	..	9,983	2,941
Massachusetts.....	2,155,347	1,151,788	909,370	.....	242,418 D	16	..	..	38,157	56,032
Michigan.....	2,109,609	1,003,448	1,038,595	.....	35,147 R	..	19	..	46,515	21,051
Minnesota.....	1,212,226	692,966 <sup>6</sup>	483,617	.....	209,349 D	11	..	..	27,866	7,777
Mississippi.....	192,190	19,384 <sup>7</sup>	5,043 <sup>8</sup>	167,538 <sup>9</sup>	148,154 S	..	9	..	225	.....
Missouri.....	1,578,628	917,315	655,039	.....	262,276 D	15	..	..	3,998	2,276
Montana.....	224,278	119,071	96,770	.....	22,301 D	4	..	..	7,313	1,124
Nebraska.....	488,939	224,165	264,774	.....	40,609 R	..	6	..	.....	.....
Nevada.....	62,117	31,291	29,357	.....	1,934 D	3	..	..	1,469	.....
New Hampshire.....	231,440	107,995	121,299	7	13,304 R	..	4	..	1,970	169
New Jersey.....	1,949,555	895,455	981,124	.....	85,669 R	..	16	..	42,683	30,293
New Mexico.....	185,767	105,464	80,303	.....	25,161 D	4	..	..	.....	.....
New York.....	6,274,527	2,780,204 <sup>10</sup>	2,841,163	.....	60,959 R	..	47	..	509,559	143,601
North Carolina.....	791,209	459,070	258,572	69,652	200,498 D	14	..	..	3,915	.....
North Dakota.....	220,716	95,812	115,139	374	19,327 R	..	4	..	8,391	1,000
Ohio.....	2,936,071	1,452,791	1,445,684	.....	7,107 D	25	..	..	37,596	.....
Oklahoma.....	721,599	452,782	268,817	.....	183,965 D	10	..	..	.....	.....
Oregon.....	524,080	243,147	260,904	.....	17,757 R	..	6	..	14,978	5,051
Pennsylvania.....	3,735,149	1,752,426	1,902,197	.....	149,771 R	..	35	..	55,161	25,365
Rhode Island.....	326,098	188,619	134,892	.....	53,727 D	4	..	..	2,587	.....
South Carolina.....	142,571	34,423	5,386	102,607	68,184 S	..	8	..	154	1
South Dakota.....	250,105	117,653	129,651	.....	11,998 R	..	4	..	2,801	.....
Tennessee.....	550,283	270,402	202,914	73,815	67,488 D	11	..	1	1,864	1,288
Texas.....	1,147,245	750,700	282,240	106,909	468,460 D	23	..	..	3,764	3,632
Utah.....	276,305	149,151	124,402	.....	24,749 D	4	..	..	2,679	73
Vermont.....	123,382	45,557	75,926	.....	30,369 R	..	3	..	1,279	620
Virginia.....	419,256	200,786	172,070	43,393	28,716 D	11	..	..	2,047	960
Washington.....	905,059	476,165	386,315	.....	89,850 D	8	..	..	31,692	10,887
West Virginia.....	748,750	429,188	316,251	.....	112,937 D	8	..	..	3,311	.....
Wisconsin.....	1,276,800	647,310	590,959	.....	56,351 D	12	..	.....	25,282	13,249
Wyoming.....	101,425	52,354	47,947	.....	4,407 D	3	..	..	931	193
Total.....	48,833,680	24,105,695	21,969,170	1,169,021	2,136,525 D	303	189	39	1,156,103	433,691

<sup>1</sup> Independent Progressive in California; Peoples in Connecticut; Independent in Kansas, Mississippi, Ohio, South Dakota; American Labor in New York; People's Progressive in Wisconsin. <sup>2</sup> Industrial Government in Minnesota. <sup>3</sup> Breakdown of other votes: Socialist 139,009; New York, Pennsylvania; Independent Socialist Labor in Wisconsin. <sup>4</sup> Prohibition 103,216; Socialist Labor 29,061; Socialist Workers 13,613; Christian Nationalist 42; Greenback 6; Vegetarian 4; blank 145,320; write-in 1,683; scattering 1,666; void 71. <sup>5</sup> Not on ballot. <sup>6</sup> Write-in votes. <sup>7</sup> Including Farmer-Labor votes. <sup>8</sup> National Democratic. <sup>9</sup> Contains 2,595 Republican and 2,443 Independent Republican votes. <sup>10</sup> Mississippi Democratic. <sup>11</sup> Includes 222,562 Liberal votes.



# Presidential Election of 1952

## CANDIDATES FOR PRESIDENT AND VICE PRESIDENT

Republican—Dwight D. Eisenhower, New York; Richard M. Nixon, California.

Democratic—Adlai E. Stevenson, Illinois; John J. Sparkman, Alabama.

Progressive—Vincent Hallinan, California; Mrs. Charlotta A. Bass, New York.

Prohibition—Stuart Hamblen, California; Enoch A. Holtwick, Illinois.

Socialist Labor<sup>2</sup>—Eric Hass, New York; Stephen Emery, New York.

Socialist—Darlington Hoopes, Pennsylvania; Samuel H. Friedman, New York.

State	Total	Rep.	Dem.	Plur.	Electoral		Prog. <sup>1</sup>	Prohib.	Soc. Lab. <sup>2</sup>	Others <sup>3</sup>
					R	D				
Alabama.....	426,120	149,231	275,075	125,844 D	..	11	....	1,814	....	....
Arizona.....	260,570	152,042	108,528	43,514 R	4	..	....	....	....	....
Arkansas.....	404,800	177,155	226,300	49,145 D	..	8	....	886	1	458
California.....	5,141,849	2,897,310	2,197,548	699,762 R	32	..	24,106	15,653	....	7,232
Colorado.....	630,103	379,782	245,504	134,278 R	6	..	1,919	....	352	2,546
Connecticut.....	1,096,911	611,012	481,649	129,363 R	8	..	....	....	535	3,715
Delaware.....	174,025	90,059	83,315	6,744 R	3	..	155	234	242	20
Florida.....	989,337	544,036	444,950	99,086 R	10	..	....	....	....	351
Georgia.....	655,803	198,979	456,823	257,844 D	..	12	....	....	....	1
Idaho.....	276,231	180,707	95,081	85,626 R	4	..	443	....	....	....
Illinois.....	4,481,058	2,457,327	2,013,920	443,407 R	27	..	....	....	9,363	448
Indiana.....	1,955,325	1,136,259	801,530	334,729 R	13	..	1,222	15,335	979	....
Iowa.....	1,268,773	808,906	451,513	357,393 R	10	..	5,085	2,882	139	248
Kansas.....	896,166	616,302	273,296	343,006 R	8	..	....	6,038	....	530
Kentucky.....	993,148	495,029	495,729	700 D	..	10	336	1,161	893	....
Louisiana.....	651,952	306,925	345,027	38,102 D	..	10	....	....	....	....
Maine.....	351,786	232,353	118,806	113,547 R	5	..	332	....	156	139
Maryland.....	902,074	499,424	395,337	104,087 R	9	..	7,313	....	....	....
Massachusetts.....	2,383,398	1,292,325	1,083,525	208,800 R	16	..	4,636	886	1,957	69
Michigan.....	2,798,592	1,551,529	1,230,657	320,872 R	20	..	3,922	10,331	1,495	658
Minnesota.....	1,379,483	763,211	608,458 <sup>4</sup>	154,753 R	11	..	2,666	2,147	2,383	618
Mississippi.....	285,532	( <sup>5</sup> )	172,566	59,600 D	..	8	....	....	....	112,966
Missouri.....	1,892,062	959,429	929,830	29,599 R	13	..	987	885	169	762
Montana.....	265,037	157,394	106,213	51,181 R	4	..	723	548	....	159
Nebraska.....	609,660	421,603	188,057	233,546 R	6	..	....	....	....	....
Nevada.....	82,190	50,502	31,688	18,814 R	3	..	....	....	....	....
New Hampshire.....	272,950	166,287	106,663	59,624 R	4	..	....	....	....	....
New Jersey.....	2,419,554	1,374,613	1,015,902	358,711 R	16	..	5,589	989	5,815	16,646
New Mexico.....	238,608	132,170	105,661	26,509 R	4	..	....	297	35	445
New York.....	7,128,241	3,952,815	3,104,601 <sup>4</sup>	848,214 R	45	..	64,211	....	1,560	5,054
North Carolina.....	1,210,910	558,107	652,803	94,696 D	..	14	....	....	....	....
North Dakota.....	270,127	191,712	76,694	115,018 R	4	..	344	302	....	1,075
Ohio.....	3,700,758	2,100,456	1,600,302	500,154 R	25	..	....	....	....	....
Oklahoma.....	948,984	518,045	430,939	87,106 R	8	..	....	....	....	....
Oregon.....	695,059	420,815	270,579	150,236 R	6	..	....	....	....	3,665
Pennsylvania.....	4,580,717	2,415,789	2,146,269	269,520 R	32	..	4,200	8,771	1,347	4,341
Rhode Island.....	414,498	210,935	203,293	7,642 R	4	..	187	....	83	....
South Carolina.....	341,086	168,082 <sup>7</sup>	173,004	4,922 D	..	8	....	....	....	....
South Dakota.....	294,283	203,857	90,426	113,431 R	4	..	....	....	....	....
Tennessee.....	892,553	446,147	443,710	2,437 R	11	..	885	1,432	....	379
Texas.....	2,076,006	1,102,878	969,288	133,590 R	24	..	294	1,983	....	1,563
Utah.....	329,554	194,190	135,364	58,826 R	4	..	....	....	....	....
Vermont.....	153,539	109,717	43,355	66,362 R	3	..	282	....	....	185
Virginia.....	619,689	349,037	268,677	80,360 R	12	..	311	....	1,160	504
Washington.....	1,102,708	599,107	492,845	106,262 R	9	..	2,460	....	633	7,663
West Virginia.....	873,548	419,970	453,578	33,608 D	..	8	....	....	....	....
Wisconsin.....	1,607,370	979,744	622,175	357,569 R	12	..	....	....	....	5,451
Wyoming.....	129,251	81,047	47,934	33,113 R	3	..	....	194	36	40
Total.....	61,551,978	33,824,351	27,314,987 <sup>5</sup>	6,509,364 R	442	89	132,608	72,768	29,333	177,931

<sup>1</sup> Independent Progressive in California; Peace Progressive in Massachusetts; American Labor in New York. <sup>2</sup> Independent Government in Minnesota, New York and Pennsylvania. <sup>3</sup> Breakdown of Other votes: Independent (pledged to Republican candidate in Miss.), 112,966; Socialist, 18,322; Christian Nationalist, 10,557; Socialist Workers, 5,956; write-in, 4,431; Poor Man's, 4,203; scattering, 4,040; Independent, 3,665; Constitution, 2,911; Vincent Hallinan (Independent in Wis.), 2,174; People's party of Connecticut, 1,466; Farrell Dobbs (Independent in Wis.), 1,350; Darlington Hoopes (Independent in Wis.), 1,157; Eric Hass (Independent in Wis.), 770; Social Democrat, 504; America First, 233; Independent Progressive, 225; Liberty, 1. <sup>4</sup> Democratic-Farmer Labor votes. <sup>5</sup> 112,966 Independent votes were pledged to the Republican candidate; these are shown as Other votes. <sup>6</sup> Includes 416,711 Liberal votes. <sup>7</sup> Includes 155,289 votes for separate set of electors for Republican candidates by petition.

# Electoral Vote for President, 1888-1924

States	1888	1892	1896	1900	1904	1908	1912	1916	1920	1924
	Harrison, Rep. Cleveland, Dem.	Cleveland, Dem. Harrison, Rep. Weaver, Pro.	McKinley, Rep. Bryan, Dem.	McKinley, Rep. Bryan, Dem.	Roosevelt, Rep. Parker, Dem.	Taft, Rep. Bryan, Dem.	Wilson, Dem. Taft, Rep. Roosevelt, Prog.	Wilson, Dem. Hughes, Rep.	Harding, Rep. Cox, Dem.	Coolidge, Rep. Davis, Dem. La Follette, Prog.
Alabama	10	11	11	11	11	11	12	12	12	12
Arizona							3	3	3	3
Arkansas	7	8	8	8	9	9	9	9	9	9
California	8	8 1	8 1	9	10	10	2 11	13	13	13
Colorado	3	4	4	4	5	5	6	6	6	6
Connecticut	6	6	6	6	7	7	7	7	7	7
Delaware	3	3	3	3	3	3	3	3	3	3
Florida	4	4	4	4	5	5	6	6	6	6
Georgia	12	13	13	13	13	13	14	14	14	14
Idaho		3	3	3	3	3	4	4	4	4
Illinois	22	24	24	24	27	27	29	29	29	29
Indiana	15	15	15	15	15	15	15	15	15	15
Iowa	13	13	13	13	13	13	13	13	13	13
Kansas	9	10	10	10	10	10	10	10	10	10
Kentucky	13	13	12 1	13	13	13	13	13	13	13
Louisiana	8	8	8	8	9	9	10	10	10	10
Maine	6	6	6	6	6	6	6	6	6	6
Maryland	8	8	8	8	1 7	2 6	8	8	8	8
Massachusetts	14	15	15	15	16	16	18	18	18	18
Michigan	13	5 9	14	14	14	14	15	15	15	15
Minnesota	7	9	9	9	11	11	12	12	12	12
Mississippi	9	9	9	9	10	10	10	10	10	10
Missouri	16	17	17	17	18	18	18	18	18	18
Montana		3	3	3	3	3	4	4	4	4
Nebraska	5	8	8	8	8	8	8	8	8	8
Nevada	3	3	3	3	3	3	3	3	3	3
New Hampshire	4	4	4	4	4	4	4	4	4	4
New Jersey	9	10	10	10	12	12	14	14	14	14
New Mexico							3	3	3	3
New York	36	36	36	36	39	39	45	45	45	45
North Carolina	11	11	11	11	12	12	12	12	12	12
North Dakota		1 1 1	3	3	4	4	5	5	5	5
Ohio	23	1 22	23	23	23	23	24	24	24	24
Oklahoma						7	10	10	10	10
Oregon	3	3 1	4	4	4	4	5	5	5	5
Pennsylvania	30	32	32	32	34	34	38	38	38	38
Rhode Island	4	4	4	4	4	4	5	5	5	5
South Carolina	9	9	9	9	9	9	9	9	9	9
South Dakota		4	4	4	4	4	5	5	5	5
Tennessee	12	12	12	12	12	12	12	12	12	12
Texas	13	15	15	15	18	18	20	20	20	20
Utah			3	3	3	3	4	4	4	4
Vermont	4	4	4	4	4	4	4	4	4	4
Virginia	12	12	12	12	12	12	12	12	12	12
Washington		4	4	4	5	5	7	7	7	7
West Virginia	6	6	6	6	7	7	8	1 7	8	8
Wisconsin	11	12	12	12	12	13	13	13	13	13
Wyoming		3	3	3	3	3	3	3	3	3
Total	233 168	277 145 22	271 176	292 155	336 140	321 162	435 8 88	277 254	404 127	382 136 13

NOTE: For electoral votes by state in elections later than 1924, see preceding pages.

## CONGRESS

## Representatives Under Each Apportionment

Source: The Congressional Directory.

The apportionment based on the Seventeenth Census (1950) distributes the 435 seats in the House among the States according to the method of equal proportions. By this method the per cent difference between the average number of Representatives per million people in any 2 States is made as small as possible. Also, the per cent difference between the average districts, i.e., the average number of persons per Representative, in any 2 States is made as small as possible. By equalizing the representation of all pairs of States, the method gives as nearly equal representation as possible to all States in proportion to their population.

State	Constitutional apportionment	First Census, 1790	Second Census, 1800	Third Census, 1810	Fourth Census, 1820	Fifth Census, 1830	Sixth Census, 1840	Seventh Census, 1850	Eighth Census, 1860	Ninth Census, 1870	Tenth Census, 1880	Eleventh Cen- sus, 1890	Twelfth Census, 1900	Thirteenth Cen- sus, 1910*	Fifteenth Cen- sus, 1930	Sixteenth Cen- sus, 1940	Seventeenth Census, 1950
Alabama				1	3	5	7	7	6	8	8	9	9	10	9	9	9
Arizona														1	1	2	2
Arkansas						1	1	2	3	4	5	6	7	7	7	7	6
California							2	2	3	4	6	7	8	11	20	23	30
Colorado										1	1	2	3	4	4	4	4
Connecticut	5	7	7	7	6	6	4	4	4	4	4	4	5	5	6	6	6
Delaware	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1
Florida							1	1	1	2	2	2	3	4	5	6	8
Georgia	3	2	4	6	7	9	8	8	7	9	10	11	11	12	10	10	10
Idaho											1	1	1	1	2	2	2
Illinois				1	1	3	7	9	14	19	20	22	25	27	27	26	25
Indiana				1	3	7	10	11	11	13	13	13	13	13	12	11	11
Iowa							2	2	6	9	11	11	11	11	9	8	8
Kansas									1	3	7	8	8	8	7	6	6
Kentucky		2	6	10	12	13	10	10	9	10	11	11	11	11	9	9	8
Louisiana				1	3	3	4	4	5	6	6	6	6	7	8	8	8
Maine				7	7	8	7	6	5	5	4	4	4	4	3	3	3
Maryland	6	8	9	9	9	8	6	6	5	6	6	6	6	6	6	6	7
Massachusetts	8	14	17	13	13	12	10	11	10	11	12	13	14	16	15	14	14
Michigan						1	3	4	6	9	11	12	12	13	17	17	18
Minnesota								2	2	3	5	7	9	10	9	9	9
Mississippi				1	1	2	4	5	5	6	7	7	8	8	7	7	6
Missouri					1	2	5	7	9	13	14	15	16	16	13	13	11
Montana											1	1	1	2	2	2	2
Nebraska									1	1	3	6	6	6	5	4	4
Nevada									1	1	1	1	1	1	1	1	1
New Hampshire	3	4	5	6	6	5	4	3	3	3	2	2	2	2	2	2	2
New Jersey	4	5	6	6	6	6	5	5	5	7	7	8	10	12	14	14	14
New Mexico														1	1	2	2
New York	6	10	17	27	34	40	34	33	31	33	34	34	37	43	45	45	43
North Carolina	5	10	12	13	13	13	9	8	7	8	9	9	10	10	11	12	12
North Dakota											1	1	2	3	2	2	2
Ohio			1	6	14	19	21	21	19	20	21	21	21	22	24	23	23
Oklahoma														5	8	9	8
Oregon								1	1	1	1	2	2	2	3	4	4
Pennsylvania	8	13	18	23	26	28	24	25	24	27	28	30	32	36	34	33	30
Rhode Island	1	2	2	2	2	2	2	2	2	2	2	2	2	3	2	2	2
South Carolina	5	6	8	9	9	9	7	6	4	5	7	7	7	7	6	6	6
South Dakota											2	2	2	3	2	2	2
Tennessee		1	3	6	9	13	11	10	8	10	10	10	10	10	9	10	9
Texas							2	2	4	6	11	13	16	18	21	21	22
Utah														1	1	2	2
Vermont		2	4	6	5	5	4	3	3	3	2	2	2	2	1	1	1
Virginia	10	19	22	23	22	21	15	13	11	9	10	10	10	10	9	9	10
Washington											1	2	3	5	6	6	7
West Virginia										3	4	4	5	6	6	6	6
Wisconsin							2	3	6	8	9	10	11	11	10	10	10
Wyoming											1	1	1	1	1	1	1
Total	65	106	142	186	213	242	232	237	243	293	332	357	391	435	435	435	435

\* No apportionment was made in 1920.



## Qualifications for Voting in the 48 States

Source: Questionnaires to the states.

State	Minimum length of U. S. citizenship	Residence <sup>1</sup>			Literacy test	Poll tax <sup>2</sup>
		State	County	District		
Alabama.....		2 yr.	1 yr.	3 mo. <sup>3</sup>	Yes	\$1.50 <sup>14</sup>
Arizona.....	1 yr.	1 yr.	30 da.	30 da.	....	
Arkansas.....		1 yr.	6 mo.	30 da. <sup>4</sup>	....	1.00
California.....	3 mo.	1 yr.	3 mo.	54 da. <sup>4</sup>	Yes	....
Colorado.....		1 yr.	3 mo.	30 da. <sup>5</sup>	....	....
Connecticut.....		1 yr.		6 mo. <sup>6</sup>	Yes	....
Delaware.....		1 yr.	3 mo.	30 da.	Yes	....
Florida.....		1 yr.	6 mo.	....	....	....
Georgia <sup>7</sup> .....		1 yr.	6 mo.	6 mo.	Yes	....
Idaho.....	( <sup>9</sup> )	6 mo.	30 da.	....	....	....
Illinois.....		1 yr.	3 mo.	30 da.	....	....
Indiana.....		6 mo.	2 mo. <sup>8</sup>	30 da. <sup>4</sup>	....	....
Iowa.....		6 mo.	60 da.	10 da. <sup>4</sup>	....	....
Kansas.....		6 mo.	....	30 da. <sup>10</sup>	....	....
Kentucky.....		1 yr.	6 mo.	60 da. <sup>4</sup>	....	....
Louisiana.....		2 yr.	1 yr. <sup>11</sup>	3 mo. <sup>12</sup>	Yes	....
Maine.....		6 mo.	....	3 mo. <sup>9</sup>	Yes	....
Maryland.....		1 yr.	6 mo.	6 mo.	....	....
Massachusetts.....		1 yr.	....	6 mo. <sup>6</sup>	Yes	....
Michigan.....		6 mo.	....	30 da. <sup>8</sup>	....	....
Minnesota.....	3 mo.	6 mo.	....	30 da.	....	....
Mississippi.....		2 yr.	....	1 yr.	( <sup>15</sup> )	2.00
Missouri.....		1 yr.	2 mo.	2 mo. <sup>6</sup>	....	....
Montana.....		1 yr.	30 da.	30 da. <sup>4</sup>	....	....
Nebraska.....		6 mo.	40 da.	10 da.	....	....
Nevada.....		6 mo.	30 da.	10 da. <sup>4</sup>	....	....
New Hampshire.....		6 mo.	....	6 mo. <sup>8</sup>	Yes	....
New Jersey.....		1 yr.	5 mo.	....	....	....
New Mexico.....		1 yr.	3 mo.	30 da. <sup>4</sup>	....	....
New York.....	90 da.	1 yr.	4 mo.	30 da.	Yes	....
North Carolina.....		1 yr.	4 mo.	4 mo.	Yes	....
North Dakota.....		1 yr.	3 mo.	30 da. <sup>4</sup>	....	....
Ohio.....		1 yr.	40 da.	40 da. <sup>4</sup>	....	....
Oklahoma.....		1 yr.	6 mo.	30 da. <sup>4</sup>	....	....
Oregon.....		6 mo.	....	....	Yes	....
Pennsylvania.....	1 mo.	1 yr. <sup>13</sup>	....	2 mo.	....	....
Rhode Island.....	1 yr.	1 yr.	....	6 mo. <sup>6</sup>	....	....
South Carolina.....	2 yr.	2 yr.	1 yr.	4 mo.	....	( <sup>16</sup> )
South Dakota.....	5 yr.	1 yr.	3 mo.	30 da. <sup>4</sup>	....	....
Tennessee.....		1 yr.	6 mo.	....	....	....
Texas.....		1 yr.	6 mo.	....	....	1.75
Utah.....	3 mo.	1 yr.	4 mo.	2 mo. <sup>4</sup>	....	....
Vermont <sup>20</sup> .....		1 yr.	....	3 mo. <sup>8, 18</sup>	....	....
Virginia.....		1 yr.	6 mo. <sup>19</sup>	30 da. <sup>4</sup>	Yes	1.50
Washington.....		1 yr.	3 mo.	30 da. <sup>17</sup>	Yes	....
West Virginia.....		1 yr.	2 mo.	....	....	....
Wisconsin.....		1 yr.	....	10 da.	....	....
Wyoming.....		1 yr.	60 da.	10 da.	( <sup>18</sup> )	....

<sup>1</sup> Registration of all or part of the voters is required in most states. <sup>2</sup> Annual levy. Although poll (or head) taxes are levied in several other states, those listed make payment of the tax a condition for voting. <sup>3</sup> Precinct or ward. <sup>4</sup> Precinct. <sup>5</sup> City or town, and 15 days in precinct. <sup>6</sup> City or town. <sup>7</sup> Minimum voting age is 18; in all other states it is 21. <sup>8</sup> First paper must have been taken out. <sup>9</sup> Township. <sup>10</sup> Township or ward. <sup>11</sup> Parish. <sup>12</sup> Must be able to read any section of state constitution. <sup>13</sup> 6 months if previously qualified elector or natural-born citizen of state. <sup>14</sup> 1953 act makes poll tax noncumulative except for 2 years preceding election in which elector offers to vote. <sup>15</sup> To qualify to vote for representatives to general assembly or justices. <sup>16</sup> County, city, or town. <sup>17</sup> City, town, ward, or precinct. <sup>18</sup> Repealed in 1945. <sup>19</sup> Municipality 4 mo. <sup>20</sup> A person must take freeman's oath as qualification for voting.

## Plurality and Majority

In order to win a plurality, a candidate must receive a greater number of votes than anyone running against him. If he receives 50 votes, for example, and two other candidates receive 49 and 2, he will have a plurality of one vote over his closest opponent.

However, a candidate does not have a majority unless he receives more than 50% of the total votes cast. In the example above, the candidate does not have a majority, because his 50 votes are less than 50% of the 101 votes cast.

If only two candidates receive votes, a plurality is necessarily a majority; but if more than two candidates receive votes, it is possible for one to have a substantial plurality without a majority.

## Principal Bills and Treaties Since 1900

## PARTY ABBREVIATIONS

Dem.—Democratic  
Rep.—RepublicanA.L.—American Labor  
F.L.—Farmer-LaborInd.—Independent  
Prog.—ProgressiveProh.—Prohibition  
Soc.—Socialist

Bill or treaty	Party	House vote		Senate vote		Date enacted
		Yea	Nay	Yea	Nay	
Hay-Pauncefote Treaty. England agreed the U. S. can build and control an Isthmian canal open to all nations on equal terms (ratified Dec. 16, 1901).		No vote required		72	6	Nov. 18, 1901
Spooner Bill. Authorized purchase of New Panama Canal Company's rights.		252	8	67	6	June 28, 1902
Elkins Act. Forbade railroads from deviating from published rates; punished givers and receivers of rebates		241	6	No record vote		Feb. 19, 1903
Hay-Bunau-Varilla Treaty. Granted the U. S. a ten-mile strip in Panama in perpetuity for \$10,000,000 in gold and an annuity of \$250,000.	Dem. Rep.	No vote required		9 41	15 1	Mar. 19, 1903
Hepburn Rate Bill. Gave the ICC control over express companies and pipe lines; allowed them to reduce rates upon complaint of shipper; outlawed midnight rates; forbade free passes; required uniform book-keeping system.		216	4	71	3	June 29, 1906
Pure Food and Drug Act. Made shipments in interstate commerce of adulterated foods and drugs illegal.		240	17	63	4	June 30, 1906
Payne-Aldrich Tariff. Protective, averaging 36.38 per cent; lowered rates on coal, lumber, etc.; free list included wood pulp, oil, etc.		195	183	47	31	Aug. 5, 1909
Immigration Act. Barred paupers, anarchists, criminals and diseased persons.						Mar. 26, 1910
Mann-Elkins Act. Gave the ICC jurisdiction over telephone and telegraph companies; right to alter railroad rates on their own initiative.		200	126	50	12	June 18, 1910
Underwood-Simmons Tariff. Averaged 26.67 per cent with 958 reductions, 86 increases and 307 unchanged items.		254	103	36	17	Oct. 3, 1913
Glass-Owen Bill. Established a Federal Reserve system.		298	60	43	25	Dec. 23, 1913
Federal Trade Commission. Established to enforce anti-trust laws.		No roll-call vote		53	16	Sept. 26, 1914
Clayton Antitrust Act. Prohibited monopolistic price discrimination, restrictive sales or leases, intercorporate stock holding, interlocking directorates of competing companies capitalized at \$1,000,000 or more. Exempted labor from antitrust laws and declared peaceful picketing legal.		244	54	35	24	Oct. 15, 1914
Federal Farm Loan Act. Created system of land banks to lend money to farmers on their land and permanent improvements.		No roll-call vote		58	5	July 17, 1916
Keating-Owen Act. Forbade shipping in interstate commerce of goods produced by children. (Declared unconstitutional in 1918.)		337	46	52	12	Sept. 1, 1916
Adamson Act. Limited working hours of railroad employees to 8 per day on interstate railroads.		259	36	43	28	Sept. 3-5, 1916*
Burnett Immigration Bill. Required literacy test for immigrants.		308	87	64	7	Vetoed, Jan. 29, 1917
		285	106	62	19	Feb. 5, 1917 (Reconsideration vote)
Armed Neutrality Act. Allowed American vessels to be armed in war zones.				Filibustered		Defeated, Mar. 4, 1917
Declaration of War. Against Germany (World War I).		373	50	82	6	Apr. 6, 1917

\* As Sept. 3 was a Sunday, the validity of the President's signature was questioned. Therefore, the bill was re-signed on the following Tuesday.

Bill or treaty	Party	House vote		Senate vote		Date enacted
		Yea	Nay	Yea	Nay	
Volstead Act. Prohibited manufacture, transportation and sale of beverages containing more than .5 per cent alcohol.		321	70	Voice vote approval		Vetoed, Oct. 27, 1919
		(Reconsideration vote)				
	Dem.	...	...	27	11	Oct. 28, 1919
	Rep.	...	...	38	9	
Treaty of Versailles.	Dem. Rep.	No vote required		4	42	Rejected, Nov. 19, 1919
				35	13	
Transportation Act. Reorganized ICC with 11 members and increased powers; authorized loans to railroads; created Railroad Labor Board; provided for consolidation of railroads.		250	150	47	17	Feb. 29, 1920
Treaty of Versailles.	Dem. Rep.	No vote required		21	23	Rejected, Mar. 19, 1920
				28	12	
Federal Water Power Act. Created federal power commission to license citizens who use navigable streams for power; licenses limited to 50 years.				52	18	June 18, 1920
Emergency Quota Act. Limited annual number of immigrants from any country to 3 per cent of that nationality living in U. S. in 1910. (Renewed in 1922 for two more years.)		No record vote		78	1	May 19, 1921
Capper-Volstead Act. Exempted farm co-operatives from antitrust laws.		284	49	58	1	Feb. 18, 1922
Washington Conference Treaties:						
Four Power Pacific Peace Pact. Related to Pacific Island possessions of Britain, France, U. S., and Japan.	Dem. Rep.	No vote required		12	23	Mar. 24, 1922
				55	4	
Five Power Limitation on Naval Armaments Treaty. Powers were U. S., Britain, France, Italy and Japan.		No vote required		74	1	Mar. 29, 1922
Nine Power Treaty. Guaranteed the territorial integrity of China.		No vote required		65	0	Mar. 30, 1922
Fordney-McCumber Tariff. Highly protective, averaging 33.22 per cent; gave tariff commission power to suggest that President increase or decrease rates not more than 50 per cent of original rate on any item to meet competition.	Dem. Rep.	...	...	3	24	Sept. 21, 1922
		...	...	45	1	
World Court Protocol.	Dem. Rep.	No vote required		23	3	Defeated, Mar. 3, 1923
				1	46	
Federal Intermediate Credit Act. Lent money to farmers to extent of 75 per cent of value of harvested crops and livestock.		277	3	No record vote		Mar. 4, 1923
Bonus Bill. Provided 20-year endowment policies for veterans.	Dem. Rep.	177	20	32	9	Vetoed, May 15, 1924
	F.L.	175	34	33	8	
	Soc.	1	...	2	..	
	Ind.	1	...	..	..	
		(Reconsideration vote)				
	Dem.	145	21	27	9	May 19, 1924
	Rep.	166	57	30	17	
	F.L.	...	...	2	..	
	Soc.	1	...	..	..	
	Ind.	1	...	..	..	
Immigration Quota Law. Limited annual number of immigrants to 2 per cent of each country's residents in U. S. in 1890. After 1927, the number was to be limited annually to 150,000. Did not apply to nations of Western Hemisphere.		308	58	69	9	May 26, 1924
World Court Membership.	Dem. Rep.	No vote required		36	2	Jan. 27, 1926
	F.L.			40	14	
				..	1	
Norris-Morin Resolution. Would have completed construction of Muscle Shoals for nitrates and power.		251	165	48	25	Pocket veto, June 4, 1928



Bill or treaty	Party	House vote		Senate vote		Date enacted	
		Yea	Nay	Yea	Nay		
Kellogg-Briand Pact. Outlawed wars and prescribed arbitration of international disputes.		No vote required		85	1	Jan. 15, 1929	
Agricultural Marketing Act. Created federal farm board with power to lend money to farm co-operatives and to create stabilization corporations to buy farm surplus and to store and sell abroad to maintain prices.	Dem.	121	32	33	2	June 15, 1929	
	Rep.	245	2	21	32		
	F.L.	1	...	..	..		
Hawley-Smoot Tariff. Very high protective tariff, averaging 40.08 per cent but giving President power to initiate reduction or increase in rates.	Dem.	14	132	5	30	June 17, 1930	
	Rep.	208	20	39	11		
	F.L.	...	1	..	1		
War Debt Moratorium. Provided for moratorium on payment of interest and war debt installments by nations indebted to U. S.	Dem.	120	95	33	6	Dec. 23, 1931	
	Rep.	196	5	36	6		
	F.L.	1	...	..	..		
Reconstruction Finance Corporation. Established with a working fund of \$500,000,000 and power to borrow more to release frozen assets in banks and mortgage companies and to help bankrupt railroads.	Dem.	153	43	29	5	Jan. 22, 1932	
	Rep.	182	12	34	3		
Norris-LaGuardia Act. Limited granting of injunctions against labor; required open testimony in open court and outlawed yellow dog contracts.		363	13	75	5	Mar. 23, 1932	
Hawes-Cutting Bill. Granted Philippine independence but was rejected by the Philippine legislature because of its economic and immigration provisions. Therefore, it did not become effective.		No record vote		No record vote		Vetoed, Jan. 13, 1933	
		(Reconsideration vote)					
	Dem.	191	1	45	1		
	Rep.	82	93	20	25		
3.2 Percent Liquor Law. Legalized manufacture and sale of 3.2 wines and beers.	Dem.	1	...	1	..	Mar. 22, 1933	
	Rep.						
Civilian Conservation Corps. Created to relieve unemployment and to work at reforestation, road building and flood control.		No roll-call vote		No roll-call vote		Mar. 31, 1933	
Agricultural Adjustment Act. Created the AAA, which was authorized to limit acreage on specified crops at farmers' option and to pay benefits to farmers; money for this purpose to be raised by a process tax, which was declared unconstitutional Jan. 16, 1936.		315	98	52	31	May 12, 1933	
Tennessee Valley Authority. Established to develop and sell electric power, to serve as yardstick for electricity rates, to develop rural electrification, to establish flood control, and to produce fertilizer.	Dem.	284	2	48	3	May 18, 1933	
	Rep.	17	89	14	17		
	F.L.	5	...	1	..		
Federal Securities Act. Required that all stock and bond issues be registered and approved.		No roll-call vote		No roll-call vote		May 27, 1933	
Home Owners Refinancing Act. Established the HOLC, which took over mortgages in exchange for bonds in order to save home owners from losing homes.		383	4	No record vote		June 13, 1933	
Glass-Steagall Banking Act. Created Federal Deposit Insurance Corporation to insure deposits up to \$5000; required that private banks be either investment or deposit banks, but not both.		No record vote		No roll-call vote		June 16, 1933	
National Industrial Recovery Act. Created NRA; authorized establishment of trade associations; suspended antitrust laws; authorized drawing-up of codes of Fair Competition to be accepted by President; guaranteed collective bargaining and required employers to accept approved maximum and minimum wage provisions. (Declared unconstitutional in 1935.)	Dem.	266	25	46	4	June 16, 1933	
	Rep.	53	50	10	20		
	F.L.	4	...	1	..		
Gold Reserve Act. Gave President power to devalue gold and to impound for treasury all gold in Federal System and to establish Exchange Stabilization Fund.	Dem.	287	2	55	1	Jan. 30, 1934	
	Rep.	68	38	10	22		
	F.L.	5	...	1	..		
Farm Mortgage Refinancing Act. Created Federal Farm Mortgage Corporation to assist farmers in payment of mortgages on easier interest terms.		No record vote		No record vote		Jan. 31, 1934	
Tydings-McDuffie Act. Gave the Philippine Islands independence.	Dem.	No roll-call vote		51	..	Mar. 24, 1934	
	Rep.			16	8		
	F.L.			1	..		
Johnson Debt Default Bill. Forbade sale in this country of securities of defaulting countries.		No record vote		No record vote		Apr. 13, 1934	

Bill or treaty	Party	House vote		Senate vote		Date enacted
		Yea	Nay	Yea	Nay	
Securities and Exchange Act. Established Securities and Exchange Commission; required licensing of stock exchanges; made certain speculative practices illegal; gave Federal Reserve Board power to fix margins; required full financial statements from registered companies.	Dem. Rep. F.L.	254 22 4	11 73 ...	47 15 ..	1 12 ..	June 6, 1934
Trade Agreements Act. Authorized President to reduce tariffs by as much as 50 per cent of prevailing rates for those countries which granted the U. S. most favored nation treatment without the need for Senatorial ratification for three years.	Dem. Rep. F.L.	No record vote		51 5 1	5 28 ..	June 12, 1934
National Housing Act. Created Federal Housing Administration to administer funds for modernizing homes and for lending for new construction.		176	19	No record vote		June 28, 1934
Federal Farm Bankruptcy Act (Frazier-Lemke Act). Declared moratorium on farm mortgage foreclosures. (Declared unconstitutional in May, 1935.)		No record vote		60	16	June 28, 1934
World Court Ratification.	Dem. Rep. F.L. Prog.	No vote required		43 9 .. ..	20 14 1 1	Defeated, Jan. 29, 1935
National Labor Relations Act (Wagner-Connelly Act). Created the NLRB with power to determine appropriate collective bargaining unit subject to elections they supervised at request of the workers; to certify the duly chosen trade union and to take testimony about unfair employer practices and issue cease and desist orders.	Dem. Rep. F.L. Prog.	No record vote		49 12 1 1	4 8 .. ..	July 5, 1935
Social Security Act. Created social security board to administer old age benefits based on earnings before the age of 65; unemployment administered under state laws and grants to states to aid the needy aged, blind, orphans, widows, etc.		372	33	76	6	Aug. 14, 1935
Banking Act of 1935. Increased power of Federal Reserve Board of Governors over open market and credit transactions.		No record vote		No record vote		Aug. 23, 1935
Public Utilities Act (Wheeler-Rayburn Act). Required all public utilities to register with the SEC and limited utility holding corporations to first degree unless necessity required greater complexity.	Dem. Rep. F.L. Prog.	203 7 3 6	59 83 ... ...	No record vote		Aug. 26, 1935
Farm Mortgage Moratorium Act. Allowed three-year moratorium on foreclosures with court permission upon payment of reasonable rental.		No record vote		No record vote		Aug. 29, 1935
Neutrality Act. Allowed President, for 6 months, to prohibit exports of arms, etc. (or their transportation by U. S. vessels) to belligerent countries.		211	83	79	2	Aug. 31, 1935
Soldiers' Bonus Bill. Made 9-year 3-per cent bonds redeemable on demand.	Dem. Rep. F.L. Prog.	265 72 3 6	29 30 ... ...	56 15 2 1	9 7 .. ..	Vetoed, Jan. 24, 1936
			(Reconsideration vote)			
	Dem. Rep. F.L. Prog.	248 66 3 7	32 29 ... ...	57 16 2 1	12 7 .. ..	Jan. 27, 1936
Soil Conservation and Domestic Allotment Act. Granted payments to farmers who let their land lie fallow or planted cover crops.	Dem. Rep. F.L. Prog.	246 20 1 ...	25 64 1 7	49 5 1 1	9 11 .. ..	Mar. 2, 1936
Reciprocal Trade Agreement Act. Extended to June, 1940, period during which President is authorized to negotiate foreign trade under Trade Agreements Act of 1934.		284	0	58	24	Mar. 1, 1937

Bill or treaty	Party	House vote		Senate vote		Date enacted	
		Yea	Nay	Yea	Nay		
Neutrality Act. Forbade export of arms and ammunition to belligerents, the sale in this country of belligerents' securities, the use of American ships for carrying munitions; required belligerents to pay upon purchase and carry all purchases in their own ships (cash and carry clause).		377	12	41	15	May 1, 1937	
Judiciary Act. Allowed voluntary retirement of Supreme Court justices and other federal court judges on full pension at age of 70.		No roll-call vote		Unanimous, no roll-call vote		Aug. 25, 1937	
National Housing Act. Established the U. S. Housing Authority to administer loans to local communities and states for rural and urban construction. (Amended in 1938.)		275	86	64	16	Sept. 1, 1937	
Agricultural Adjustment Act. Continued soil conservation program; provided parity payments and commodity loans to farmers; established crop insurance corporations and ever-normal granary plan.	Dem.	243	54	53	17	Feb. 16, 1938	
	Rep.	14	74	2	11		
	F.L.	5	...	..	2		
	Prog.	1	7	..	1		
	Ind.	...	...	1	..		
Wage and Hours Act. Provided minimum wage of 25 cents to rise to 40 cents after 6 years; limited hours from 44 per week the first year to 40 after the third year; goods produced by "oppressive child labor" could not be shipped in interstate commerce.	Dem.	247	41	No record vote		June 25, 1938	
	Rep.	31	48				
	F.L.	5	...				
	Prog.	7	...				
Alien Registration Act (Smith Act). Required fingerprinting of all aliens in U. S.; made it unlawful for anyone to advocate or teach overthrow of U. S. government or to belong to any group advocating such.		382	4	No record vote		June 28, 1940	
Selective Service Act. Established system for compulsory service in armed forces. (Extended in 1941.)	Dem.	211	33	50	17	Sept. 16, 1940	
	Rep.	52	112	8	10		
	F.L.	...	1	..	2		
	Prog.	...	2	..	1		
	Ind.	...	...	..	1		
	A.L.	...	1	..	..		
Lend-Lease. Provided system whereby U. S. lent goods and munitions to democratic nations in return for services and goods.		260	165	60	31	Mar. 11, 1941	
Selective Service Act Extension. Extended period of service to not more than 30 months in time of peace and eliminated 900,000-man limit of Army.	Dem.	182	65	38	16	Aug. 18, 1941	
	Rep.	21	133	7	13		
	Prog.	...	3	..	1		
	A.L.	...	1	..	..		
Declarations of World War II: Against Japan.	Dem.	235	...	56	..	Dec. 8, 1941	
	Rep.	149	1	24	..		
	Prog.	3	...	1	..		
	Ind.	...	...	1	..		
	A.L.	1	...	..	..		
Against Germany.		393	0	88	0	Dec. 11, 1941	
U. N. Charter Ratification.	Dem.	No vote required		53	..	July 28, 1945	
	Rep.			35	2		
	Prog.			1	..		
Case Bill. Would have set up mediation board, established enforceable 30-day cooling-off periods in labor disputes, outlawed boycotts and sympathy strikes, and authorized court injunctions.	Dem.	97	91	33	13	Vetoed, June 11, 1946	
	Rep.	133	13	28	6		
	Prog.	...	1	..	1		
	A.L.	...	1	..	..		
				(Reconsideration vote)			
	Dem.	96	118	No vote required		Defeated, June 11, 1946	
	Rep.	159	15				
Prog.	...	1					
A.L.	...	1					
British Loan Act. Established \$3,750,000,000 credit to Britain, including \$650,000,000 in lend-lease.	Dem.	157	32	29	15	July 15, 1946	
	Rep.	61	122	17	18		
	Prog.	...	1	..	1		
	A.L.	1	...	..	..		



Bill or treaty	Party	House vote		Senate vote		Date enacted
		Yea	Nay	Yea	Nay	
Atomic Energy Commission. Created five-man controlled commission without military representation but with military liaison; permitted Army and Navy to make atomic weapons; forbade distribution of fissionable materials or atomic energy information.		No record vote		No record vote		Aug. 1, 1946
Greek-Turkey Aid Bill. Authorized \$400,000,000 to furnish aid to Greece and Turkey upon application, subject to withdrawal upon request of countries, of the U. N. Security Council or General Assembly, or of President if improperly used or unnecessary.	Dem.	160	13	32	7	May 22, 1947
	Rep.	127	93	35	16	
	A.L.	...	1	..	..	
Treaty Ratifications: With Italy.	Dem. Rep.	No vote required		37	3	June 14, 1947
With Rumania.		No vote required		Voice vote approval		June 14, 1947
With Bulgaria.		No vote required		Voice vote approval		June 14, 1947
With Hungary.		No vote required		Voice vote approval		June 14, 1947
Taft-Hartley Bill (Labor-Management Relations Act, 1947). Prohibits closed shops but allows union shops by secret vote of majority of employees; makes unions subject to damage suits for unfair labor practices, such as boycotts or jurisdictional strikes; requires unions to file financial reports; requires union leaders to file statements that they are not Communistic.	Dem.	103	66	17	15	Vetoed, June 20, 1947
	Rep.	217	12	37	2	
	A.L.	...	1	..	..	
	Dem.	106	71	20	22	June 23, 1947
	Rep.	225	11	48	3	
	A.L.	...	1	..	..	
Presidential Succession Act. Made Speaker of House and President of Senate pro tempore next in line after Vice President.		365	11	50	35	July 18, 1947
National Security Act of 1947. Reorganized and co-ordinated armed forces under National Military Establishment headed by Secretary of Defense (of Cabinet rank) and including Secretaries of the Army, the Navy and the Air Force.		Voice vote approval		Voice vote approval		July 26, 1947
Foreign Assistance Act of 1948. Authorized \$5.3 billion 1-year European Recovery Program, \$275 million for military aid to Greece and Turkey, \$463 million in economic and military aid for China, \$60 million for U. N. Fund for Children.	Dem. Rep. A.L.	150 167 0	11 62 2	Voice vote approval		Apr. 3, 1948
Selective Service Act. Provided for registration of all men 18-25 and induction of enough men 19-25 to maintain Army of 837,000, Navy and Marine Corps of 666,882, and Air Force of 502,000.		259	136	Voice vote approval		June 24, 1948
Displaced Persons Bill. Admitted 205,000 European displaced persons, including 3,000 orphans.		Voice vote approval		Voice vote approval		June 25, 1948
Foreign Aid Appropriations. Appropriated funds for 1 year: \$5.055 billion for ERP, \$400 million for China, \$1.3 billion for occupied areas, \$225 million for Greece and Turkey, \$35 million for U. N. Fund for Children, \$70,710,228 for IRO.		318	62	Voice vote approval		June 28, 1948
Housing Bill. Authorized Federal loans for private construction of low-cost homes and apartments; liberalized loans to manufacturers of prefabricated houses.		351	9	Voice vote approval		Aug. 10, 1948
Bill to raise salaries: President's, \$75,000 to \$100,000 with new \$50,000 tax-free allowance; Vice President's and Speaker's, \$20,000 to \$30,000 with \$10,000 tax-free allowance.	Dem. Rep. A.L.	Voice vote approval		42 26 ..	0 9 ..	Jan. 19, 1949
ERP authorization: \$5,430,000,000 for European recovery, consisting of \$1,150,000,000 for April-June and \$4,280,000,000 for fiscal year starting July 1.		Voice vote approval		Voice vote approval		Apr. 19, 1949
Housing and slum-clearance bill. Provided for 810,000 dwelling units in 6 years, 5-year slum-clearance program, \$325,000,000 in loans and grants for farm housing aid.		Voice vote approval		Voice vote approval		July 15, 1949
North Atlantic Treaty. (For full text, consult index.)	Dem. Rep.	No vote required		50 32	2 11	July 21, 1949

Bill or treaty	Party	House vote		Senate vote		Date enacted
		Yea	Nay	Yea	Nay	
National Security bill. Changed National Military Establishment to executive Department of Defense; made Departments of Army, Navy and Air Force "military departments."		356	7	Voice vote approval		Aug. 10, 1949
Military Assistance Program. Authorized \$1,314,010,000 in military aid: for Atlantic Pact countries, \$1 billion; Greece and Turkey, \$211,370,000; "general area" of China, \$75,000,000; and South Korea, Iran and Philippines, \$27,640,000.	Dem. Rep. A.L.	172 51 0	24 84 1	Voice vote approval		Oct. 28, 1949
Foreign-aid appropriations: \$5,809,990,000, consisting of \$4,852,380,000 for ERP, \$912,500,000 for Army-occupied areas, \$45,000,000 for Greek-Turkish aid, and \$110,000 for joint Congressional Foreign-Aid Committee.		Voice vote approval		Voice vote approval		Oct. 2, 1949
Minimum-wage bill. Raised minimum wage from 40c to 75c an hour.		131	19	Voice vote approval		Oct. 26, 1949
Farm bill. Supported prices for wheat, corn, cotton, rice, peanuts at 90% of parity through 1950, 80-90% through 1951, and 75-90% on sliding-scale basis thereafter.		175	34	46	7	Oct. 31, 1949
Bill to repeal federal taxes on oleomargarine.		262	106	59	20	Mar. 16, 1950
Natural-gas bill (Kerr bill). Would have prevented FPC control on prices for natural gas distributed by interstate pipelines.		176	174	44	38	Vetoed Apr. 15, 1950
		(No reconsideration vote)				
Housing bill. Authorized over \$3.5 billion in government loans and mortgage insurance for expansion of housing program. Also turned over to state and local authorities about 150 wartime and veterans' housing projects.		Voice vote approval		Voice vote approval		Apr. 20, 1950
Bill to increase Air Force and Army. Expanded Air Force to 70 groups and from 410,000 to 502,000 men; expanded Army from 592,000 to 837,000 men.		315	4	76	0	July 11, 1950
Social Security bill. Will raise present employer's and employee's 1½% payroll tax to 2% in 1954, 2½% in 1960, 3% in 1965, and 3½% in 1970; provided financial aid to permanently disabled persons in need.		374	1	Voice vote approval		Aug. 28, 1950
Omnibus appropriations bill. Appropriated \$35,554 billion, including \$62.5 million loan to Spain, \$14,680,084,443 for Defense Dept., \$1.225 billion for rearming Western Europe, \$2.526 billion for Marshall plan, \$26.9 million for Point-4 program.		Voice vote approval		Voice vote approval		Sept. 6, 1950
Defense Production Act of 1950. Gave President power to curb prices, wages, and consumer credit, and to increase defense production.		Voice vote approval		Voice vote approval		Sept. 8, 1950
Bill to draft doctors, dentists, etc., up to 50 years of age, for 21-mo. service.		Voice vote approval		Voice vote approval		Sept. 9, 1950
Internal Security Act of 1950. Provided for registering of Communists and their Internment in times of emergency.	Dem. Rep. A.L.	186 126 0	18 1 1	24 27 ...	6 1 ...	Vetoed Sept. 22, 1950
		(Reconsideration vote)				
		161 125 0	45 2 1	26 31 ...	10 0 ...	Sept. 23, 1950
Tax-increase bill. Raised income taxes about 17%, corporation taxes about 15%; imposed 10% excise tax on TV sets and quick-freeze units.		328	7	Voice vote approval		Sept. 23, 1950
Emergency defense-appropriations bill. Appropriated \$17,099,902,285, including \$3.734 billion for Navy, \$3.166 billion for Army, \$260 million for atomic-weapon research, etc.		286	30	Voice vote approval		Sept. 27, 1950
Civil-defense bill. Provided \$3.1 billion to be supplemented by state and local governments for bomb shelters and other civil defense.		Voice vote approval		Voice vote approval		Jan. 12, 1951
Emergency presidential powers. Gave President powers to modify existing defense contracts.		Voice vote approval		Voice vote approval		Jan. 12, 1951

Bill or treaty	Party	House vote		Senate vote		Date enacted
		Yea	Nay	Yea	Nay	
Navy modernization program. Provided for 173 new warships and other vessels suitable for modern atomic warfare.		365	0	Voice vote approval		Mar. 11, 1951
GI insurance law. Provided free \$10,000 life insurance to all armed-forces personnel.		Voice vote approval		Voice vote approval		Apr. 25, 1951
Indian grain-loan act. U. S. to lend India \$190 million to buy 2 million tons of food grains.		255	82	Voice vote approval		June 15, 1951
Reciprocal Trade Agreements Act. Extended reciprocal trade agreement act to June 12, 1953, and directed President to end any concessions to Soviet bloc.		Voice vote approval		Voice vote approval		June 16, 1951
Draft act. Extended draft to July 1, 1955, and increased service to 24 months; provided preliminary study for universal military service.		339	41	Voice vote approval		June 19, 1951
Pension bill. Raised to \$120 a month the \$60-\$72 pensions to veterans disabled by nonservice disabilities.		Voice vote approval		Voice vote approval		Vetoed Aug. 6, 1951
		318	(Reconsideration vote) 45	69	9	Sept. 18, 1951
German peace resolution. Declared state of war with Germany ended.		376	0	Voice vote approval		Oct. 19, 1951
Taft-Hartley Law amendment. Permitted union-shop contracts without first polling employees.		307	18	Voice vote approval		Oct. 22, 1951
Atom-data bill. Authorized exchange of certain nonweapon atom data with friendly nations.		Voice vote approval		Voice vote approval		Oct. 30, 1951
Mutual Security Appropriation Bill. \$7,328,903,976 voted for global military and economic aid, including \$100 million for Spain.		Voice vote approval		Voice vote approval		Oct. 31, 1951
Japanese Peace Treaty. Formally ended state of war declared Dec. 7, 1941.		No vote required		66	10	Mar. 20, 1952
Tidelands Oil Bill. Gave clear title to states for submerged oil and other mineral deposits off their shores.		247	89 (No reconsideration vote)	50	35	Vetoed, May 29, 1952
McCarran-Walter Immigration and Nationality Act. Ended racial bars on immigration and retained quota system based on national origin.		205	53	Voice vote approval		Vetoed, June 25, 1952
		(Reconsideration vote)				
	Dem.	107	90	25	18	June 27, 1952
	Rep.	170	23	32	8	1952
	Ind.	1	0	...	...	
West German Peace Contracts. Established working basis for relations with Bonn Government.		No vote required		77	5	July 1, 1952
New Puerto Rican Constitution. Made Puerto Rico a commonwealth and gave it greater home rule.		Voice vote approval		Voice vote approval		July 3, 1952
Income Tax Bill. Authorized deductions on contributions up to 20%, instead of previous 15%.		Voice vote approval		Voice vote approval		July 8, 1952
Fair Trade Acts of 1952. Allowed manufacturers and retailers to set prices on trade-marked articles where state laws concur.		196	10	64	16	July 14, 1952
Korea "G.I. Bill of Rights." Granted Korean veterans with 90 days service as of June 27, 1950, rights and benefits similar to those received by veterans of World War II.		322	1	Voice vote approval		July 16, 1952
Social Security Amendment. Increased Social Security benefits to aged by 12½% and authorized pensioners to earn up to \$75 a month. Minimum payments set at \$5 a month.		Voice vote approval		Voice vote approval		July 18, 1952



Bill or treaty	Party	House vote		Senate vote		Date enacted
		Yea	Nay	Yea	Nay	
Tidelands Oil Law. Gave coastal states right to all minerals in submerged lands within their historic boundaries; Federal government retained control of remainder of continental shelf.	Dem. Rep. Ind.	97 188 0	59 18 1	Voice vote approval		May 22, 1953
Grant of 1 million tons of wheat to Pakistan to relieve famine.		310	75	Voice vote approval		June 25, 1953
Excess-profits tax extended for 6 months.	Dem. Rep. Ind.	156 169 0	38 38 1	Voice vote approval		July 15, 1953
Small Business Administration Act. Abolished RFC; replaced it by Small Business Administration with lending authority of \$275 million; no loan to exceed \$150,000.		Voice vote approval		Voice vote approval		July 30, 1953
Foreign-Aid Authorization Act. Provided \$4,531,507,000 for military and economic aid to 53 free countries.	Dem. Rep. Ind.	126 94 1	29 80 0	Voice vote approval		Aug. 7, 1953
Refugee Immigration Act. Admitted 214,000 refugees in next 3 years over immigration quotas.		190	44	Voice vote approval		Aug. 7, 1953
Statehood for Hawaii and Alaska. (Allowed to die in House.)	Rep. Dem. Ind.	... ... ...	... ... ...	3 42 1	41 2 0	Defeated, 1954
Bricker Amendment. Would have limited President's treaty-making power. (Defeated by lack of $\frac{2}{3}$ majority vote.)	Rep. Dem. Ind.	... ... ...	... ... ...	32 28 0	16 14 1	Defeated, Feb. 25, 1954
Cut in excise tax by \$999 million a year.		395	1	72	8	Apr. 1, 1954
Authorization of St. Lawrence Seaway.	Rep. Dem. Ind.	144 96 1	64 94 0	Voice vote approval		May 13, 1954
Extension of Reciprocal Trade Act for 1 year.		Voice vote approval		Voice vote approval		July 1, 1954
Public-housing bill. Allowed 35,000 units for year, but limited housing to cities where Federal slum clearance had displaced families.		358	30	59	21	Aug. 2, 1954
Tax revision to cost \$1.363 million in revenue.	Rep. Dem. Ind.	201 114 0	3 73 1	42 19 0	3 22 1	Aug. 16, 1954
Communist Control Act. Outlawed Communist party, though membership in party was not made crime.		265	2	79	0	Aug. 24, 1954
Compromise Mutual Security Appropriation of \$5,243,575,-795, of which \$2,781,499,816 is "new money."		188	77	Voice vote approval		Aug. 26, 1954
Farm bill. Provided flexible price support.		208	47	44	28	Aug. 28, 1954
Amendment to Atomic Energy Act of 1946. Allowed private interests to enter field of atomic power.	Rep. Dem. Ind.	Voice vote approval		6 38 1	35 6 0	Aug. 30, 1954
Social Security benefits increased and extended to additional 10,000,000 persons.		Voice vote approval		Voice vote approval		Sept. 1, 1954
Death penalty for peacetime espionage.		Voice vote approval		Voice vote approval		Sept. 3, 1954
Revocation of citizenship of persons convicted by conspiracy to overthrow government by force.		Voice vote approval		Voice vote approval		Sept. 3, 1954

## THE UNITED STATES ARMED SERVICES

### U. S. MILITARY ACADEMY

Source: U. S. Military Academy.

Established in 1802 by an Act of Congress, the U. S. Military Academy is located on the west bank of the Hudson River some 50 miles north of New York City. Admission may be gained only by appointment to one of the 2,496 cadetships authorized by law. These cadetships are allocated among the following sources of nomination:

#### Noncompetitive:

Representatives (4 each) .....	1,740
Senators (4 each) .....	384
Other:	
Hawaii and Alaska .....	8
District of Columbia .....	6
Canal Zone Government .....	2
Puerto Rico .....	4
Vice Presidential .....	3
	23

#### Competitive:

Army and Air Force:	
Regular components .....	90
Reserve components .....	90
Presidential .....	89
Sons of deceased veterans .....	40
Honor military & honor naval schools .....	40
Total .....	2,496

Graduation of the senior class leaves about 750 vacant cadetships each year, and candidates may be nominated for these vacancies during the year preceding the admission date—the first Tuesday in July.

Candidates must be citizens of the U. S., between the ages of 17 and 22, unmarried, at least 5' 6" tall and able to meet the mental, physical and physical aptitude requirements. Candidates with acceptable college records may be exempted from taking achievement examinations in mathematics and English and may qualify mentally by passing the West Point Aptitude Test. Entrance requirements and procedures for appointment are described in the U. S. Military Academy Catalog, available without charge from The Registrar, U. S. Military Academy, West Point, N. Y.

Cadets receive their entire education at Government expense and are paid \$81.12 per month. From this sum, they pay for their meals, uniforms, textbooks, etc. Upon successful completion of the 4-year course, the graduate receives the degree of Bachelor of Science and is commissioned a second lieutenant in the regular Army or Air Force. He must serve at least 3 years. If he resigns then, he must serve an additional 3 years in the Reserves.

### U. S. NAVAL ACADEMY

Source: U. S. Naval Academy.

On October 10, 1845, the Naval School was established at Fort Severn, Annapolis, Maryland. Five years later it was renamed the United States Naval Academy, and the

following year a regular four-year course was adopted. At present, the curriculum consists of courses in the following departments: executive; seamanship and navigation; ordnance and gunnery; marine engineering; aviation; electrical engineering; mathematics; English, history and government; foreign languages; hygiene; and physical training.

Candidates are selected as follows:

- 5 from the District of Columbia
- 40 sons of men and women killed in action or who have died, or may hereafter die of wounds or injuries, or disease contracted, in active service in World Wars I and II
- 75 annually from among sons of officers and enlisted men in the regular Army, Navy, Marine Corps, Air Force and Coast Guard.
- 160 enlisted Navy and Marine personnel selected annually by competitive examination
- 160 annually chosen by the Secretary of the Navy from the Naval and Marine Corps Reserves
- 5 Puerto Ricans chosen by the Resident Commissioner of Puerto Rico
- 1 on the recommendation of the Governor of Puerto Rico
- 4 Filipinos designated by the President of the United States
- 1 from the Canal Zone
- 20 annually from schools designated by the Army and Navy as honor schools and from NROTC schools.
- 20 from the American republics and the Dominion of Canada
- Unlimited: Sons of persons who have been or shall hereafter be awarded the Congressional Medal of Honor.

Each Senator, Representative, delegate to Congress, and the Vice President may have not more than 5 Midshipmen at the Naval Academy. The President selects the 5 from the District of Columbia, the 40 sons of deceased veterans of World Wars and the 75 sons of officers and enlisted men in the regular Army, Navy, Marine Corps, Air Force and Coast Guard. The President also appoints the sons of holders of the Medal of Honor.

Subject to the existence of vacancies and the availability of accommodations, the Secretary of the Navy may nominate for appointment a limited number of additional candidates. These must be recommended by the Academic Board from among the fully qualified, regularly nominated alternate and competitive candidates of the same year who were unable to enter because of the appointment of men preceding them in nomination.

Candidates for admission must be between 17 and 22 years of age on July 1 of

their entering year. They may qualify by taking entrance examinations, by presenting an acceptable secondary school certificate and taking special examinations in English and mathematics, or by completing a sufficient number of acceptable college courses. Candidates must meet physical requirements and be unmarried.

Midshipmen are paid \$973.44 a year. Graduates of the Academy are granted Bachelor of Science degrees and are commissioned as ensigns in the Navy or second lieutenants in the Marine Corps. In addition, a limited number of the members of graduating classes may be commissioned in the U. S. Air Force.

## U. S. COAST GUARD ACADEMY

*Source: U. S. Coast Guard Academy.*

The cadet system of the Coast Guard was established by law on July 31, 1876, when the "School of Instruction" for the Revenue Cutter Service, predecessor to the Coast Guard, was authorized.

The *J. C. Dobbin*, a converted schooner, served as the first schoolship, and was succeeded in 1878 by the bark *Chase*, a ship built for cadet training. First winter quarters were in a sail loft at New Bedford, Mass. The school was moved in 1900 to a two-story frame school at Curtis Bay, Md., to provide a more technical education; and in 1910 to Fort Trumbull, New London, Conn. In 1932 the Academy moved to its present site in the latter city.

The 4-year college-level curriculum leads to a Bachelor of Science degree in Engineering and to a commission of ensign in the U. S. Coast Guard.

Cadets receive appointment to the Academy through a nation-wide competitive examination, held annually in February. Candidates must be between 17 and 22 years of age, physically sound, unmarried and at least 5' 6" tall. They must agree to remain unmarried until graduation and to serve at least 4 years on active duty. Cadets receive \$973 per annum to cover their uniform and incidental expenses, and are furnished their rations and quarters. Applications for appointment may be made to the Commandant (PTP), U. S. Coast Guard, Washington 25, D. C.

## U. S. MERCHANT MARINE ACADEMY

*Source: U. S. Merchant Marine Academy.*

The U. S. Merchant Marine Cadet Corps was established Mar. 15, 1938, and its Academy is located on the south shore of Long Island Sound at Kings Point, N. Y. The Academy has a complement of 800 cadet-midshipmen representing every U. S. state, D. C., Alaska, the Canal Zone, Hawaii, and Puerto Rico. In addition, it is authorized to receive each year, for the full period of training, not more than 12 candidates from Latin American republics.

Appointments to the Academy are governed by a state and territory quota system, based on population, and are made through competitive examinations. A candidate must be an unmarried citizen between 17 and 21, with a one-year age waiver granted to veterans. He must have 15 high-school credits, including 1 unit in algebra, 1 in plane geometry, 1 in physics, and 3 in English.

The course is 4 years, consisting of 1 year as Fourth Classman at the Academy, 1 year as Third Classman aboard a merchant ship, and 2 years as Second and First Classman at the Academy. Study includes marine engineering, navigation, electricity, ship construction, naval science and tactics, economics, business, languages, history, and other subjects.

On completion of their courses, cadet-midshipmen are examined for their original Merchant Marine license as deck or engineer officers in any ship in the U. S. Merchant Marine. They also receive Bachelor of Science degrees and commissions as officers in the U. S. Maritime Service and the U. S. Naval Reserve. Over 9,000 officers have been graduated.

## History of the Armed Services

*Source: Encyclopaedia Britannica.*

### U. S. ARMY

When Gen. Washington, on July 3, 1775, took command of the Colonial militia (about 8,000 men) besieging Boston, the event marked the union of the forces of the 13 separate Colonies under one head, and the U. S. Army was born. In Jan., 1776, the Continental Congress decided that these troops should be separate in organization from those of local communities and established them as the U. S. Regular Army. When these forces were disbanded after the war only some 80 officers and men were retained to guard U. S. Army stores. From this humble beginning, in the ensuing years, the strength of the U. S. Army rose or fell according to national and international conditions. A strength of over 7,000,000 was reached in World War II.

### U. S. NAVY

In Sept. and Oct., 1775, Gen. Washington maintained 5 schooners and a sloop with officers and men from his army for the purpose of preying on inbound English supply vessels and thereby caused the birth of the U. S. Navy. In Dec., 1775, the Continental Congress expanded this by providing for construction of naval craft and the appointment of a marine committee (one member from each colony) which continued until 1794 when further ships and manpower were provided for by act of Congress. Upon completion of these ships in 1798, a Navy Department was established as the controlling agency, and the secretary given Cabinet rank.



### U. S. AIR FORCE

Until creation of the National Military Establishment in July 1947, which united the services under one command, U. S. military air forces operated under the several commands. In the Army, operations came under the Signal Corps until 1918, when the U. S. Air Service was established. In 1926, the U. S. Air Corps came into being and remained until 1942 when the Army Air Forces were formed, composed of the U. S. Air Corps and its supporting services.

In the Navy, ship-based fighters and bombers were originally attached to the several fleets and under the orders of the fleet commanders. Marine Corps aviation came under control of the Navy.

In 1947, the U. S. Air Force was established as an autonomous arm of the Armed Forces. At that time, the name U. S. Air Corps and the names of the services within the Army Air Forces were abolished.

### U. S. COAST GUARD

This service was originally created by an act of Congress approved on Jan. 28, 1915, which combined the then Revenue Cutter

Service and the Life-Saving Service. On July 1, 1939, the Lighthouse Service of the Department of Commerce was also consolidated into this unit. The Coast Guard, through its antecedents, is the oldest organization under the Federal government and, until the Navy Department was established in 1798, it served as the only U. S. armed force afloat. It operates under the Treasury Department in time of peace, serving in the capacity of life and property saving, prevention of smuggling, clearance of debris in harbors, maintaining an ice patrol in northern waters, flood service, etc. In time of war it is attached to the Navy Department, and in the recent conflict, it performed admirable service.

### U. S. MARINE CORPS

Founded in 1775 and observing its official birthday on Nov. 10, the U. S. Marine Corps was developed to be able to serve to advantage on land or sea.

It has been used successfully in every U. S. war beginning with the Revolution when it consisted of 2 battalions. It reached its high in achievement in the recent war when its some 475,000 men and officers performed historic deeds in the Pacific Theater of Operations.

## Largest Armies of the World

Source: *Encyclopaedia Britannica*

Country	Army personnel <sup>1</sup>	Year	Country	Army personnel <sup>1</sup>	Year
Belgium.....	150,000	1951	Iran.....	130,000	(?)
Brazil.....	118,000	1948	Italy.....	250,000	(?)
Bulgaria.....	175,000	1953	Netherlands.....	175,000	1949
China (Communist).....	5,000,000	1953	Pakistan.....	250,000	(?)
China (Nationalist).....	600,000	1953	Poland.....	600,000	1953
Czechoslovakia.....	300,000	(?)	Rumania.....	350,000	1953
Egypt.....	160,000	(?)	Spain.....	425,000	(?)
France.....	608,000	1953	Turkey.....	400,000	1953
Greece.....	132,000	1948	U.S.S.R.....	4,750,000	1954
Hungary.....	165,000	1952	United Kingdom.....	440,000	1954
India.....	300,000	1950	United States.....	1,530,000	1953
Indonesia.....	300,000	(?)	Yugoslavia.....	500,000	1951

<sup>1</sup> Estimated, unless otherwise indicated. <sup>2</sup> Not specified.

### Selective Service Classifications

**I-A:** Available for immediate service.

**I-A-O:** Conscientious objector available for non-combatant military service.

**I-C:** Members of the armed forces, Coast Guard, Coast and Geodetic Survey or Public Health Service or certain registrants separated therefrom.

**I-D:** Members of reserve components or student taking military training.

**II-A:** Registrant deferred because of civilian occupation (except agriculture).

**II-C:** Deferred because of agricultural occupation.

**III-A:** Registrant with dependents.

**IV-A:** Registrant who has completed service; sole surviving son of parents whose other child or children died in World War II.

**IV-B:** Officials deferred by law.

**IV-C:** Aliens.

**IV-D:** Ministers of religion or divinity students.

**IV-E:** Conscientious objectors opposed to combatant and non-combatant training and service.

**IV-F:** Physically, mentally or morally unfit.

**V-A:** Registrant over age of liability for military service.

## U. S. Armed Forces Monthly Pay Rates for Officers

Source: Department of Defense, Public Information Office.

Army, Air Force and Marine Corps	Rank	Pay grade	Monthly pay	Monthly allowances for quarters	
				With dependents	With no dependents
General of the Army	Fleet Admiral	O-8	\$963.30	\$171.00	\$136.80
General	Admiral	O-8	963.30	171.00	136.80
Lieutenant General	Vice Admiral	O-8	963.30	171.00	136.80
Major General	Rear Admiral (upper half)	O-8	963.30	171.00	136.80
Brigadier General	Rear Admiral (lower half) and Commodore	O-7	800.28	171.00	136.80
Colonel	Captain	O-6	592.80	136.80	119.70
Lieutenant Colonel	Commander	O-5	474.24	136.80	102.60
Major	Lieutenant Commander	O-4	400.14	119.70	94.20
Captain	Lieutenant	O-3	326.04	102.60	85.50
First Lieutenant	Lieutenant (junior grade)	O-2	274.18	94.20	77.10
Second Lieutenant	Ensign	O-1	222.30	85.50	68.40
Chief Warrant Officer (appt. by Sec. of Army)	Chief Warrant Officer	W-4	332.90	119.70	94.20
Same	Same	W-3	302.64	102.60	85.50
Chief Warrant Officer	Same	W-2	264.82	94.20	77.10
Warrant Officer (junior grade)	Warrant Officer	W-1	219.42	85.50	68.40

### Special Pay for Longevity

(Amounts listed below are monthly increases in the basic pay for longevity of service)

O-8 —\$29.64 after 30 years.	O-1 —\$14.82 after 2, 4, 6, 8, 10, 12 and 14 years.
O-7 —\$29.64 after 26 and 30 years.	W-4 —\$15.14 after 6, 8, 10, 12, 14, 16, 18, 22, 26 and 30 years.
O-6 —\$14.82 after 16 years; \$29.64 after 18, 22, 26 and 30 years.	W-3 —\$7.57 after 6, 8, 10, 12, 14 and 16 years; \$15.14 after 18, 22, 26 and 30 years.
O-5 —\$14.82 after 12, 14 and 16 years; \$29.64 after 18, 22 and 26 years.	W-2* —\$7.57 after 8, 10, 12, 14 and 16 years; \$15.14 after 18, 22, 26 and 30 years.
O-4 —\$14.82 after 8, 10, 12, 14 and 16 years; \$29.64 after 18, 22 and 26 years.	W-1† —\$7.57 after 6, 8, 10, 12, 14 and 16 years; \$15.14 after 18, 22 and 26 years.
O-3 —\$14.82 after 4, 6, 8, 10, 12, 14, 16, 18 and 22 years.	
O-2 —\$14.82 after 2, 4, 6, 8, 10, 12 and 14 years.	

\* For figuring increases use \$264.82 for original basic pay. † For figuring increases use \$219.42 for original basic pay.

### Insignia and Ranks of the Armed Forces

Army, Air Force and Marines		Navy and Coast Guard		
Insignia	Rank	Insignia	Rank	Stripes <sup>1</sup>
Five stars	General of the Army, Air Force	Five stars	Fleet Admiral	1—4—0
Four stars	General	Four stars	Admiral	1—3—0
Three stars	Lieutenant General	Three stars	Vice Admiral	1—2—0
Two stars	Major General	Two stars	Rear Admiral	1—1—0
One star	Brigadier General	One star	Commodore	1—0—0 <sup>a</sup>
Silver eagle	Colonel	Silver eagle	Captain	0—4—0
Silver maple leaf	Lieutenant Colonel	Silver maple leaf	Commander	0—3—0
Gold maple leaf	Major	Gold maple leaf	Lt. Commander	0—2—1
Two silver bars	Captain	Two silver bars	Lieutenant	0—2—0
One silver bar	First Lieutenant	One silver bar	Lieutenant (jg)	0—1—1
One gold bar	Second Lieutenant	One gold bar	Ensign	0—1—0
Gold bar with rounded ends, brown-enamel top, longitudinal center of gold (¾" wide x 1" long)	Chief Warrant Officer, Commissioned Warrant Officer (Marines)	Warrant specialty in silver	Commissioned Warrant Officer	0—1—0 <sup>a</sup>
Same as Chief Warrant Officer but with latitudinal center of gold	Warrant Officer (jg)	Warrant specialty in gold	Warrant Officer	0—0—1 <sup>a</sup>

<sup>1</sup> Of gold embroidery. First figure is number of 2-in. stripes; second is number of ½-in. stripes; third is number of ¼-in. stripes. <sup>2</sup> Wartime only. <sup>3</sup> Broken at 2-in. intervals with ½ in. of blue.

# U. S. Armed Forces Monthly Pay Rates for Enlisted Personnel

Source: Department of Defense, Public Information Office.

Army rank	Air Force rank	Marine rank	Navy rank	Pay grade	Monthly pay
Master Sergeant	Master Sergeant	Master Sergeant	Chief Petty Officer	E-7	\$206.39
Sergeant 1st Class	Technical Sergeant	Technical Sergeant	Petty Officer 1st Class	E-6	175.81
Sergeant	Staff Sergeant	Staff Sergeant	Petty Officer 2nd Class	E-5	145.24
Corporal	Airman 1st Class	Sergeant	Petty Officer 3rd Class	E-4	122.30
Private 1st Class	Airman 2nd Class	Marine Corporal	Navy Seaman	E-3	99.37
Private of the Army	Airman 3rd Class	Pvt. 1st Class Marine	Seaman Apprentice	E-2	85.80
Army Recruit*	Airman, Basic*	Private*	Seaman Recruit*	E-1	83.20
Army Recruit†	Airman, Basic†	Private†	Seaman Recruit†	E-1	78.00

\* With over 4 months' service. † With less than 4 months' service.

BASIC MONTHLY ALLOWANCE FOR QUARTERS: No dependents, \$51.30 for all pay grades; 1 dependent, \$51.30 for pay grades E-1 through E-3, \$77.10 for pay grades E-4 through E-7; 2 dependents, \$77.10 for all pay grades; over 2 dependents, \$96.90 for all pay grades.

## Special Pay for Longevity

(Amounts listed below are monthly increases in the basic pay for longevity of service)

E-7—\$7.64 after 4, 6, 8, 10, 12, 14 and 16 years; \$15.28 after 18, 22 and 26 years.	E-4—\$7.64 after 2, 4, 6, 8, 10, 12, 14 and 16 years; \$15.28 after 18 years.
E-6—\$7.64 after 4, 6, 8, 10, 12, 14 and 16 years; \$15.28 after 18 and 22 years.	E-3—\$7.64 after 2, 4, 6, 8, 10, 12 and 14 years.
E-5—\$7.64 after 2, 4, 6, 8, 10, 12, 14 and 16 years; \$15.28 after 18 and 22 years.	E-2—\$7.64 after 2, 4, 6, 8 and 10 years.
	E-1—\$7.64 after 2 and 4 years.

## Special Pay

Members of the uniformed services are entitled to receive special pay for the performance of certain duties required by competent orders.

### Member of Aircraft or Submarine Crew

Pay grade	Monthly rate	Pay grade	Monthly rate
O-8.....	\$150.00	W-2.....	\$100.00
O-7.....	150.00	W-1.....	100.00
O-6.....	210.00	E-7.....	75.00
O-5.....	180.00	E-6.....	68.00
O-4.....	150.00	E-5.....	60.00
O-3.....	120.00	E-4.....	53.00
O-2.....	110.00	E-3.....	45.00
O-1.....	100.00	E-2.....	38.00
W-4.....	100.00	E-1.....	30.00
W-3.....	100.00		

### Hazardous Duty

The monthly rate is \$50 for all E pay grades and \$100 for all W and O pay grades.

Hazardous duty includes:

1. Frequent and regular participation in aerial flights not as a crew member.

2. Frequent and regular participation in glider flights.

3. Parachute jumping as an essential part of military duty.

4. Demolition of explosives as a primary duty, including training for such duty.

5. Duty at a submarine escape training tank when such duty involves participation in training.

6. Duty at Navy Deep Sea Diving School or Navy experimental diving unit when

such duty involves participation in training.

### Medical Officers

The monthly rate is \$100 for pay grades O-2 through O-8.

### Diving as in Salvage and Repair

The monthly rate is not less than \$5 or more than \$30, plus \$5 for each diving hour spent in actual salvage or repair operations. This pay applies to pay grades E-1 through E-7 only.

### Sea and Foreign Duty

Pay grade	Monthly rate	Pay grade	Monthly rate
E-7.....	\$23.00	E-3.....	\$9.00
E-6.....	20.00	E-2.....	8.00
E-5.....	16.00	E-1.....	8.00
E-4.....	13.00		

### Korean Combat Pay

The monthly rate is \$45 for all pay grades.

Service in Korea does not necessarily entitle a service member to combat pay. Generally, to be entitled to combat pay during a month, he must have been subjected to hostile fire for not less than 6 days during the month while serving with a combat unit of regimental size or smaller, or in a vessel or aircraft. However, if the member received incentive or special pay for aviation, submarine, parachute, medical or dental duty, etc., during a month, he is not entitled to combat pay for that month.



## ALLOWANCES FOR SUBSISTENCE

Officers receive \$47.88 per month. Enlisted personnel receive allowances for subsistence under the following provisions: (1) when rations in kind are not available, \$2.57 per day; (2) when permission to mess separately is granted, \$1.20 per day; (3) when assigned to duty under emergency conditions where no government messing facilities are available, up to and not to exceed \$3.42 per day.

## U. S. Navy Combatant Vessels

Type	Number*
Carriers.....	15
Light carriers and carrier escorts.....	15
Battleships.....	4
Cruisers.....	20
Destroyers and destroyer escorts.....	225
Submarines.....	118
Amphibious craft, mine and patrol ships, and auxiliaries.....	660
Total.....	1,057†

\* Commissioned; as of May 15, 1954. † In addition, there are 24 commissioned vessels in Military Sea Transportation Service.

## Casualties of U. S. Major Wars

Source: Department of Defense.

War	Branch of service	Numbers engaged	Battle deaths	Other deaths	Total deaths	Wounds not mortal	Total casualties <sup>1</sup>
Revolutionary War 1775 to 1783	Army	.....	4,044	.....	.....	6,004	.....
	Navy	.....	342	.....	.....	114	.....
	Marines	.....	49	.....	.....	70	.....
	Total	.....	4,435	.....	.....	6,188	.....
War of 1812 1812 to 1815	Army	.....	1,950	.....	.....	4,000	.....
	Navy	.....	265	.....	.....	439	.....
	Marines	.....	45	.....	.....	66	.....
	Total	.....	2,260	.....	.....	4,505	.....
Mexican War 1846 to 1848	Army	.....	1,721	11,550	13,271	4,102	17,373
	Navy	.....	1	.....	.....	3	.....
	Marines	.....	11	.....	.....	47	.....
	Total	.....	1,733	.....	.....	4,152	.....
Civil War <sup>2</sup> 1861 to 1865	Army	.....	110,238	249,290	359,528	280,040	639,568
	Navy	.....	2,112	2,411	4,523	1,710	6,233
	Marines	.....	64	312	376	144	520
	Total	.....	112,414	252,013	384,427	281,894	646,321
Spanish-American War 1898	Army	280,564	345	2,565	2,910	1,512	4,422
	Navy	22,875	10	0	10	47	57
	Marines	3,321	6	0	6	21	27
	Total	306,760	361	2,565	2,926	1,580	4,506
World War I 1917 to 1918	Army	4,057,101	50,510	69,446	119,956	193,663	313,619
	Navy	473,262	436	7,285	7,721	884	8,605
	Marines	78,827	2,457	787	3,244	7,714	10,958
	Total	4,609,190	53,403	77,815	130,921	202,261	333,182
World War II 1941 to 1945	Army <sup>3</sup>	10,420,000	237,049	68,957	306,006	571,822	877,828
	Navy	4,424,557	36,488	23,618	60,106	32,754	92,860
	Marines	669,100	19,568	4,089	23,657	55,396	79,053
	Total	15,513,657	293,105	96,664	389,769	659,972	1,049,741

<sup>1</sup> Excludes captured or interned and missing in action who were subsequently returned to military control. <sup>2</sup> Union forces only. Totals should probably be somewhat larger as data on disposition of prisoners are far from complete. <sup>3</sup> Army data include Air Force. NOTE: All data are subject to revision. For wars before World War I, information represents best data from available records. However, due to incomplete records and possible differences in usage of terminology, reporting systems, etc., figures should be considered estimates. Leaders (.....) indicate the information is not available.

## U. S. Casualties in Korea as of Mar. 31, 1954

Total deaths: 33,237 (Army, 27,471; Navy, 403; Marine Corps, 4,213; Air Force, 1,150). Wounded in action: 103,376 (Army, 77,722; Navy, 1,576; Marine Corps, 23,711; Air Force, 387). Current missing in action: 410 (Army, 224; Navy, 66; Marine Corps, 54; Air Force, 66). Previously reported captured or missing, since returned to military control: 5,131 (Army, 4,638; Navy, 35; Marine Corps, 194; Air Force, 264). NOTE: 21 captured Army personnel refused repatriation.

## Casualties in World War II

(U. S. figures are to be found elsewhere in this section)

Country	Men in war	Battle deaths	Other deaths	Wounded	Still missing
Australia.....	1,000,000	26,951	6,875	180,864	(1)
Austria.....	800,000	280,000	24,000	350,117	122,000
Belgium.....	.....	8,460	40,564 <sup>2</sup>	.....	.....
Brazil <sup>3</sup> .....	40,334	943	32	4,222	.....
Bulgaria.....	.....	30,000 <sup>3</sup>	.....	.....	.....
Canada.....	1,031,820	32,408	9,635	53,145	0
China <sup>4</sup> .....	.....	1,319,958	.....	1,761,335	130,126
Czechoslovakia.....	.....	6,683 <sup>3</sup>	.....	8,017	.....
Denmark.....	.....	6,300 <sup>3</sup>	.....	.....	.....
Finland.....	500,000	76,893	1,961	.....	6,000
France.....	.....	201,568	261,577	400,000	140,000
Germany.....	20,000,000	3,250,000 <sup>3</sup>	3,350,000	7,250,080	1,300,000
Greece.....	.....	17,024	391,000 <sup>5</sup>	47,290	.....
Hungary.....	.....	70,000 <sup>3</sup>	.....	.....	.....
India.....	2,000,000	24,338 <sup>3</sup>	.....	64,354	.....
Italy.....	3,100,000	135,723	174,517	.....	144,505
Japan.....	9,700,000	1,270,000	620,000	140,000	85,000
Netherlands.....	.....	280,000 <sup>3</sup>	.....	.....	.....
New Zealand.....	194,000	11,625 <sup>3</sup>	.....	17,000	46 <sup>6</sup>
Norway.....	75,000	2,000	8,262	.....	0
Poland.....	.....	664,000	5,380,000	1,600,000	.....
Rumania.....	650,000 <sup>7</sup>	350,000 <sup>3</sup>	.....	.....	180,000
South Africa, Union of.....	302,128	6,840	4,005	14,363	1,841
U.S.S.R.....	.....	6,115,000 <sup>3</sup>	.....	14,012,000	.....
United Kingdom.....	5,896,000	357,116 <sup>3</sup>	.....	369,267	46,079
Yugoslavia.....	3,741,000	305,000	1,401,000	425,000	.....

<sup>1</sup> Up-to-date figures not available; 2,475 in 1946. <sup>2</sup> Also 20,000 Jews and non-Belgians living in Belgium. <sup>3</sup> Deaths from all causes. <sup>4</sup> Figures cover period July 7, 1937-Sept. 2, 1945, and concern only Chinese regular troops. They do not include casualties suffered by guerrillas and local military corps. <sup>5</sup> Includes 261,000 dead of starvation. <sup>6</sup> As of Dec. 31, 1946. <sup>7</sup> Against Soviet Russia; 385,847 against Nazi Germany. <sup>8</sup> Against Soviet Russia; 169,822 against Nazi Germany. Figures include all deaths, wounded, and missing. <sup>9</sup> Army and Navy figures.

## U. S. Armed Forces Personnel

Source: U. S. Department of Defense.

Year	Army*	Air Force*	Navy	Marines	Coast Guard†	Men‡	Women
1934.....	137,584	.....	92,312	16,361	9,985	245,299	958
1935.....	138,569	.....	95,053	17,260	10,303	249,947	935
1936.....	166,724	.....	106,292	17,248	9,545	289,311	953
1937.....	178,733	.....	113,617	18,223	10,066	309,556	1,017
1938.....	184,126	.....	119,088	18,356	9,968	320,472	1,098
1939.....	188,565	.....	125,202	19,432	10,064	332,089	1,110
1940.....	267,767	.....	160,997	28,277	13,621	455,660	1,381
1941.....	1,460,998	.....	284,427	54,359	19,036	1,793,680	6,104
1942.....	3,074,184	.....	640,570	142,613	58,998	3,902,112	14,253
1943.....	6,993,102	.....	1,741,750	308,523	154,976	9,068,994	129,357
1944.....	7,992,868	.....	2,981,365	475,604	169,264	11,400,450	218,651
1945.....	8,266,373	.....	3,380,817	474,680	171,518	12,018,974	274,414
1946.....	1,889,690	.....	983,398	155,592	29,736	2,970,688	57,992
1947.....	989,664	.....	486,245	92,222	18,972	1,548,472	19,659
1948.....	552,239	387,730	405,789	83,609	19,929	1,415,216	14,151
1949.....	658,694	419,347	448,500	86,000	23,326	1,594,481	18,060
1950.....	593,167	411,277	381,538	74,279	23,190	1,438,206	22,055
1951§.....	1,552,000	850,000	740,000	204,000	29,000	3,420,000	40,000
1952§.....	1,653,000	939,000	801,000	237,000	34,000	.....	.....
1953§.....	1,530,000	977,500	794,440	249,200	34,491	.....	.....

\* Prior to July 26, 1947, when the National Military Establishment was established, the Air Force was a part of the Army. † Not including the men in the Coast Guard during peacetime. ‡ From 1942 to and including 1945, the Coast Guard was part of the Navy; in peacetime it is attached to the Treasury Department. § Estimated.

NOTE: On June 30, 1954, the estimated strength of the Armed Forces was: Army, 1,407,200; Navy, 745,000; Air Force, 955,500; Marines, 215,000; Coast Guard, 28,500.

## Casualties in World War I

Source: Department of Defense.

(U. S. figures are to be found elsewhere in this section.)

	Total mobilized forces	Killed or died <sup>1</sup>	Wounded	Prisoners or missing	Total casualties
Austria-Hungary.....	7,800,000	1,200,000	3,620,000	2,200,000	7,020,000
Belgium.....	267,000	13,716	44,686	34,659	93,061
British Empire <sup>2</sup> .....	8,904,467	908,371	2,090,212	191,652	3,190,235
Bulgaria.....	1,200,000	87,500	152,390	27,029	266,919
France <sup>2</sup> .....	8,410,000	1,357,800	4,266,000	537,000	6,160,800
Germany.....	11,000,000	1,773,700	4,216,058	1,152,800	7,142,558
Greece.....	230,000	5,000	21,000	1,000	27,000
Italy.....	5,615,000	650,000	947,000	600,000	2,197,000
Japan.....	800,000	300	907	3	1,210
Montenegro.....	50,000	3,000	10,000	7,000	20,000
Portugal.....	100,000	7,222	13,751	12,318	33,291
Rumania.....	750,000	335,706	120,000	80,000	535,706
Russia.....	12,000,000	1,700,000	4,950,000	2,500,000	9,150,000
Serbia.....	707,343	45,000	133,148	152,958	331,106
Turkey.....	2,850,000	325,000	400,000	250,000	975,000

<sup>1</sup> Includes deaths from all causes. <sup>2</sup> Official figures.

## Veterans' Benefits

Veterans of World War I were the first in our history to receive compensation for injuries, allotments for the support of dependents, life insurance, medical care and vocational rehabilitation. Beginning with 1940, these benefits were slowly broadened.

The following benefits available to veterans of World War II and the Korean War have specific time limitations and, in most cases, are applicable only to those whose discharge was not under dishonorable conditions.

**Education and Training: Veterans of World War II:** For a period of 1 year plus the time in service up to 4 years, the VA pays \$500 a year toward all tuition, books, etc., and a monthly subsistence allowance varying from \$65 to \$120, depending on the nature of the training and the number of the veteran's dependents.

**Veterans of the Korean War:** For a maximum period of 1½ times the duration of active service, not exceeding 36 months, the VA pays sums varying from \$110 to \$160 per month toward subsistence, tuition, supplies, etc.

**Re-employment:** The veteran is to be reinstated in the same position or an equivalent one unless, in the case of a private employer, changed circumstances make this impossible.

**Loans:** Only loans for the purchase or construction of a home, to buy a farm and farm equipment or business property and equipment, are permissible. The VA will guarantee the lender against loss up to 60% of a home loan with a maximum of

\$7,500. On other loans, the guarantee is up to 50% with a maximum of \$4,000 involving real estate and \$2,000 on non-real estate loans. The interest rate in all cases must not exceed 4½% per year.

The following benefits are also available to those having some service-connected illness or disability:

**Disability Compensation:** The VA pays from \$15.75 to \$172.50 per month with additional sums for specific conditions up to \$400 per month, plus allowances for wife, children or dependent parents.

**Vocational rehabilitation:** Necessary training expenses, special equipment, etc., toward a definite job objective are paid for, plus a monthly allowance varying from \$65 to \$120 in addition to compensation.

**Medical and dental care:** This includes complete care in VA or certain other Federal hospitals. It also covers treatment (not requiring hospitalization) at a VA field station or by an approved private physician or dentist. Medicine, instruments, appliances, mechanical equipment, etc., are supplied. Full domiciliary care is also provided where necessary.

**Death benefits:** \$10,000, less any government insurance, is paid to survivors in the immediate family. Compensation to a widow is \$75 per month, with an allowance for each child.

**NOTE:** Since our space has permitted only a general statement of the principal benefits available to veterans, the reader is referred to his local office of the Veterans' Administration (VA) for detailed information.



# U. S. Postal Regulations

Source: U. S. Post Office.

## FIRST CLASS:

Letters and written and sealed matter: 3¢ for each oz., except that drop letters are subject to 2¢ for each oz. when deposited for local delivery at offices not having letter-carrier service, provided they are not collected or delivered by rural or star-route carriers.

Government postal cards: single, 2¢; double, 4¢.

Private mailing or post cards: 2¢.

Limit of weight when mailed from one first-class post office to another: 40 lb. in local, first and second zones, 20 lb. in third to eighth zones.

Limit of weight when mailed to or from second-, third- and fourth-class post offices: 70 lb.

## AIR MAIL (LIMIT 8 OZ.):

6¢ for each oz. or fraction thereof within the continental U. S., within any Territory or possession of the U. S., or between any of the foregoing. This includes air mail to or from Alaska, Hawaii, Puerto Rico, Virgin Islands of the U. S., Canton Island, Canal Zone, Guam and any other place where the U. S. mail service is in operation.

## AIR PARCEL POST (OVER 8 OZ. TO 70 LB.):

The zone rates below shall apply to mailable matter of any class carried by air. Such matter shall not exceed 100 in. in length and girth combined, including written and other matter of the first class, whether sealed or unsealed. Fractions of a lb. are charged as a full lb.

Parcels weighing less than 10 lb. and measuring more than 84 in., but not more than 100 in. in length and girth combined, shall be subject to the 10-lb. rate.

### Air Parcel-Post Zone Rates

Zone and (miles)	First lb.	Addl. lbs.
First, Second & Third (to 300) ..	60¢	48¢
Fourth (300-600) .....	65¢	50¢
Fifth (600-1,000) .....	70¢	56¢
Sixth (1,000-1,400) .....	75¢	64¢
Seventh (1,400-1,800) .....	75¢	72¢
Eighth (over 1,800) .....	80¢	80¢

The eighth-zone rate shall be charged on air parcel post between the U. S. or its Territories and possessions and overseas A.P.O.'s and Fleet post offices, as well as naval vessels and commands afloat addressed in care of Fleet post offices at New York or San Francisco.

Air parcels mailed at New York, N. Y., and addressed to Puerto Rico and the Virgin Is. are subject to the seventh-zone rate.

## SECOND CLASS (NO WEIGHT LIMIT):

Newspapers, magazines and other periodicals containing notice of second-class entry.

For rates for publications mailed by the publishers or registered news agents, consult local postmaster.

Transient rate for matter mailed by others than the publishers or registered news agents: 2¢ for the first 2 oz., 1¢ for each additional 2 oz. However, if the fourth-class rate is cheaper, it shall apply.

## THIRD CLASS (LIMIT 8 OZ.):

Merchandise, books, printed matter and all other mailable matter not in first or second class.

Regular rate: 2¢ for the first 2 oz., 1¢ for each additional oz. Books and catalogs of 24 pages or more, seeds, cuttings, bulbs, etc.: 2¢ for the first 2 oz., 1½¢ for each additional 2 oz.

Bulk rate: for \$10 per year or fraction thereof, separately addressed identical pieces of third-class matter in quantities of not less than 20 lb. or of not less than 200 pieces are subject to the lb. rates of postage applicable to the entire bulk mailed at one time.

The bulk rate for miscellaneous printed matter, etc. is 14¢ for each lb., with a minimum charge of 1½¢ per piece. For books and catalogs of 24 pages or more, seeds, etc., the rate is 10¢ for each lb., with a minimum charge of 1½¢ per piece.

Pieces of such size or form as to prevent ready facing and tying in bundles and requiring individual distributing throughout are subject to a minimum charge of 3¢ each.

## FOURTH CLASS (PARCEL POST) (OVER 8 OZ.):

Merchandise, books, printed matter and all other mailable matter not in first or second class.

The zone rates below shall apply to fourth-class matter, except catalogs, books, library books, publications or records for the blind, and certain controlled circulation publications.

Limit of size\*: 72 in. in length and girth combined.

Limit of weight\*: over 8 oz. to 40 lb. in local, first and second zones, over 8 oz. to 20 lb. in third to eighth zones.

Note: The following five items have a size limit of 100 in. in length and girth

\* When mailed from one first-class post office to another.

combined, a weight limit of over 8 oz. to 70 lb.: (1) parcels sent to or from rural or star routes; (2) parcels sent to or from second-, third-, and fourth-class post offices; (3) parcels containing baby fowl, live plants, trees, shrubs, or agricultural commodities (not including manufactured products thereof); (4) parcels containing books; (5) parcels mailed between the U. S. and any Army or Fleet post office or between the U. S. and any Territory or possession of the U. S.

#### Fourth-Class Zone Rates

Zone and (miles)	First lb.	Addl. lbs.
Local .....	\$.18	\$.0145
First & Second (to 150)* .....	.23	.0395
Third (150-300) .....	.23	.0515
Fourth (300-600) .....	.24	.0690
Fifth (600-1,000) .....	.26	.0925
Sixth (1,000-1,400) .....	.28	.1195
Seventh (1,400-1,800) .....	.30	.1520
Eighth (over 1,800) .....	.32	.1805

\* In the 1st or 2nd zone, where the distance by the shortest practicable mail route is 300 ml. or more, the rate shall be the same as for the 3rd zone.

The zone rates below shall apply to individually addressed catalogs and similar printed advertising matter in bound form weighing more than 8 oz. but not exceeding 10 lb.

#### Catalog Zone Rates\*

Zone and (miles)	First lb.	Addl. half-lbs.
Local .....	\$.12	\$.0075
First & Second (to 150)† .....	.13	.0150
Third (150-300) .....	.14	.0200
Fourth (300-600) .....	.15	.0250
Fifth (600-1,000) .....	.17	.0325
Sixth (1,000-1,400) .....	.18	.0400
Seventh (1,400-1,800) .....	.19	.0500
Eighth (over 1,800) .....	.20	.0600

\* Fractions of one-half cent or less are counted as one-half cent; fractions of a cent exceeding one-half cent are counted as one cent in the total amount.

† In the 1st or 2nd zone, where the distance by the shortest practicable mail route is 300 ml. or more, the rate shall be the same as for the 3rd zone.

#### BOOKS (LIMIT 70 LB.):

Books (containing no advertising matter other than incidental announcements of books) for all zones: 8¢ first lb., 4¢ each additional lb.

#### LIBRARY BOOKS (LIMIT 70 LB.):

Books sent by authorized libraries to readers and when returned by such readers, for delivery within the first three zones or the state in which mailed: 4¢ first lb., 1¢ each additional lb.

#### SPECIAL DELIVERY AND SPECIAL HANDLING:

The prepayment of the special-delivery fee entitles mail to the most expeditious handling and special delivery.

Prepayment of the special-handling fee entitles fourth-class matter to the most

expeditious handling, transportation and delivery possible, but not special delivery at the office of address.

#### Special Delivery and Special Handling

Weight	Special delivery			Special handling (4th class only)
	First class	2nd, 3rd, 4th class		
Up to 2 lb. ....	20¢	35¢	15¢	
2 to 10 lb. ....	35¢	45¢	20¢	
Over 10 lb. ....	50¢	60¢	25¢	

#### MONEY ORDERS:

Money orders for amounts from 1¢ to \$100 are issued upon written application made by the remitter or his agent showing the amount of the order and the names and complete addresses of the payee and remitter. Fees are as follows:

Amount of order	Fee
\$ .01 to \$ 5.00 .....	.10¢
5.01 to 10.00 .....	.15¢
10.01 to 50.00 .....	.25¢
50.01 to 100.00 .....	.35¢

#### REGISTERED MAIL:

Fees for domestic registered mail (first-, second- and third-class matter, and sealed fourth-class matter on which postage at the first-class rate has been paid):

Indemnity limit]	Fee
No indemnity* .....	\$.30
\$ .01 to \$ 5.00 .....	.40
5.01 to 25.00 .....	.55
25.01 to 50.00 .....	.65
50.01 to 75.00 .....	.75
75.01 to 100.00 .....	.85
100.01 to 200.00 .....	.95
200.01 to 300.00 .....	1.05
300.01 to 400.00 .....	1.15
400.01 to 500.00 .....	1.25
500.01 to 600.00 .....	1.35
600.01 to 700.00 .....	1.45
700.01 to 800.00 .....	1.55
800.01 to 900.00 .....	1.65
900.01 to 1000.00 .....	1.75

\* The minimum registration fee does not provide for indemnification in the event of loss, rifling or damage, and is only applicable to matter having no intrinsic value. Matter having intrinsic value or involving cost of duplication for which the sender desires indemnification in the event of loss, rifling or damage, requires a registration fee in excess of the minimum fee. Items similar to the following are considered as having no intrinsic value, and may be registered upon payment of the minimum registration fee: correspondence, notices, legal documents, birth certificates, contracts, certificates of title, deeds, inventories, mortgages, rights of way, trust deeds, briefs, bank books, blue prints, passports, insurance policies, office reports, checks, bank drafts, cashier's checks, money orders, U. S. savings bonds (series E), postal savings certificates, U. S. Treasury savings notes (series D), way bills, ship manifests, ship trip reports, graphs, commercial letters of credit, motor vehicle drivers' licenses, personal records and files, abstracts of title, immigration papers and stock rights. This includes nonnegotiable securities (including certificates of stock). If registering indemnity is desired, sender may pay a fee higher than the minimum to provide for indemnification for cost of duplication.

When the declared value exceeds the maximum indemnity covered by the registry fee by \$1,000 or more, there shall be charged additional fees (surcharges). The additional fees (surcharges) for each \$1,000 or part of \$1,000 on articles destined to points within the several zones applicable to fourth-class matter shall be as follows:

Zone	Fee
For local delivery or for delivery within 1st zone .....	12¢
For delivery within 2nd zone .....	14¢
For delivery within 3rd zone .....	16¢
For delivery within 4th zone .....	17¢
For delivery within 5th or 6th zones ..	18¢
For delivery within 7th or 8th zones ..	19¢

### INSURED MAIL:

Fee for insured mail (savings bonds, stubs, etc.) treated as registered mail under special authorization by the Department: 20¢.

Fees for domestic insured mail (third- and fourth-class matter):

Indemnity limit	Fee
\$ .01 to \$ 5.00 .....	5¢
5.01 to 10.00 .....	10¢
10.01 to 25.00 .....	15¢
25.01 to 50.00 .....	20¢
50.01 to 100.00 .....	30¢
100.01 to 200.00 .....	35¢

### C.O.D. MAIL:

Fees for domestic unregistered C.O.D. mail (third- and fourth-class matter and sealed domestic mail matter of any class bearing postage at the first-class rate):

Indemnity limit	Fee
\$ .01 to \$ 5.00 .....	30¢
5.01 to 10.00 .....	40¢
10.01 to 25.00 .....	60¢
25.01 to 50.00 .....	70¢
50.01 to 100.00 .....	80¢
100.01 to 150.00 .....	90¢
150.01 to 200.00 .....	1.00

Fees for domestic registered C.O.D. mail (sealed domestic mail of any class bearing postage at the first-class rate):

Amount collectible and indemnity payable	Fee
\$ .01 to \$ 10.00 .....	80¢
10.01 to 50.00 .....	1.10
50.01 to 100.00 .....	1.20
100.01 to 200.00* .....	1.40

\* Limit of collections.

When indemnity in excess of \$200 is desired, the fees for domestic registered C.O.D. mail are:

Indemnity limit	Fee
\$200.01 to \$ 300.00 .....	\$1.50
300.01 to 400.00 .....	1.60
400.01 to 500.00 .....	1.70
500.01 to 600.00 .....	1.80
600.01 to 700.00 .....	1.90
700.01 to 800.00 .....	2.00
800.01 to 1000.00 .....	2.10

### MISCELLANEOUS:

In registered and insured mail, a receipt card will be returned to the sender upon request. When a card is requested showing to whom and when the delivery was made, the rate is 7¢ if the request is made at the time of mailing, 15¢ if made thereafter. When a card is requested showing to whom and when the delivery was made and the address, the rate is 31¢ and must be paid at the time of mailing.

Fees for effecting delivery of domestic registered, insured, and C.O.D. mail to addressee only or to addressee or order: 20¢.

Fee for notifying sender or his representative of inability to deliver a C.O.D. article: 5¢.

Certificates of mailing for ordinary mail of any class: 3¢ for each article described thereon. Additional certificates for ordinary, registered, insured and Collect-on-delivery mail: 1¢ for each article described thereon.

The sending of registered or insured mail to Army and Navy personnel overseas is restricted. Consult postmaster for details. C.O.D. mail cannot be sent to Navy personnel on board ships or at overseas shore stations.

### FOREIGN REGULAR MAIL:

*Letters and letter packages:* To Canada and Mexico, 3¢ per oz. or fraction. To all other countries, 8¢ for 1st oz., 4¢ per additional oz. or fraction. Weight limit: 4 lb. 6 oz. (60 lb. to Canada).

*Post cards:* To Canada and Mexico, 2¢ each, 4¢ with reply paid. To all other countries, 4¢ each, 8¢ with reply paid.

### FOREIGN AIR MAIL:

*Air-letter sheets:* Air letters, consisting of sheets which can be folded into the form of an envelope and sealed, are acceptable for dispatch by air mail at a uniform rate of 10¢ each to all foreign countries. The sheets are sold at all post offices at 10¢ each. No enclosures, adhesive tape or stickers are permitted.

*Letters and letter packages:* See table for rates.



## Air-Mail Rates from U. S. to Selected Countries

Country	Air mail <sup>1</sup>	Air parcel post			Country	Air mail <sup>1</sup>	Air parcel post		
		Initial unit <sup>2</sup>	Addl. weight <sup>3</sup>	Limit, lbs.			Initial unit <sup>2</sup>	Addl. weight <sup>3</sup>	Limit, lbs.
Albania.....	\$.15	....	....	..	Indonesia.....	\$.25	\$1.75	\$1.00	11
Algeria.....	.15	....	....	..	Iran.....	.25	....	....	..
Argentina.....	.10	\$1.51	\$.76	44	Iraq.....	.25	1.47	.72	44
Australia.....	.25	1.62	1.27	11	Ireland.....	.15	.97	.37	15
Austria.....	.15	1.05	.49	22	Israel.....	.25	1.42	.67	22
Bahamas.....	.10	.83	.14	22	Italy.....	.15	1.08	.50	44
Belgium.....	.15	.98	.43	44	Jamaica.....	.10	....	....	..
Bermudas.....	.10	.76	.13	22	Japan.....	.25	1.27	.91	22
Bolivia.....	.10	1.08	.40	44	Jordan.....	.25	....	....	..
Brazil.....	.10	1.48	.64	44 <sup>4</sup>	Korea, Rep. of.....	.25	1.37	1.01	22
British Guiana.....	.10	1.07	.39	22	Lebanon.....	.25	1.22	.64	44 <sup>18</sup>
British Honduras.....	.10	.80	.20	22	Liberia.....	.25	.86	.56	22
Bulgaria.....	.15	....	....	..	Mexico.....	.06 <sup>5</sup>	.64	.18	44
Burma.....	.25	....	....	..	Morocco, French.....	.15	1.19	.54	44
Canada <sup>6, 7</sup> .....	.06	....	....	..	Netherlands.....	.15	.89	.44	44
Ceylon.....	.25	1.75	1.00	22	New Zealand.....	.25	1.82	1.17	22
Chile.....	.10	1.31	.56	22	Nicaragua.....	.10	.80	.29	44
China <sup>7</sup> .....	.25	1.43 <sup>8</sup>	1.08 <sup>8</sup>	22 <sup>9</sup>	Norway.....	.15	1.02	.47	44
Colombia.....	.10	1.21	.40	44	Pakistan.....	.25	1.63	.84	22
Costa Rica.....	.10	.79	.29	44	Panama.....	.10	.91	.21	44
Cuba.....	.08	(*)	(*)	22	Paraguay.....	.10	....	....	..
Czechoslovakia.....	.15	.88	.48	44	Peru.....	.10	1.23	.37	44
Denmark.....	.15	.97	.47	44	Philippines.....	.25	1.81	1.26	44 <sup>14</sup>
Dominican Republic.....	.10	.86	.22	44	Poland.....	.15	1.06	.52	44
Ecuador.....	.10	1.24	.33	44	Portugal.....	.15	.71	.44	22 <sup>15</sup>
Egypt.....	.15	1.35	.64	22	Rumania.....	.15	....	....	..
El Salvador.....	.10	1.02	.26	44	Saudi Arabia.....	.25	1.60 <sup>11</sup>	.80 <sup>11</sup>	22 <sup>11</sup>
Ethiopia.....	.25	....	....	..	Spain.....	.15	1.25	.50	11
Finland.....	.15	.88	.51	44	Surinam.....	.10	.92	.41	44
France.....	.15	1.22	.44	44	Sweden.....	.15	.85	.49	44
French Guiana.....	.10	.79	.44	11	Switzerland.....	.15	.92	.46	44
Germany.....	.15	.95	.45	44	Syria.....	.25	1.22	.64	44 <sup>12</sup>
Greece.....	.15	1.07	.57	22	Thailand.....	.25	2.29	1.50	22
Guatemala.....	.10	1.01	.25	44	Turkey.....	.15	1.15	.57	44
Haiti.....	.10	.72	.21	44	U. of S. Africa.....	.25	1.31	.94	11
Honduras, Rep. of.....	.10	.78	.28	44 <sup>10</sup>	U.S.S.R.....	.15	1.66	.63	22
Hong Kong.....	.25	1.74	1.39	22	United Kingdom.....	.15	1.00	.41	22
Hungary.....	.15	....	....	..	Uruguay.....	.10	1.26	.76	44
Iceland.....	.15	.89	.33	44	Venezuela.....	.10	1.27	.36	44
India.....	.25	1.70	.96	22	Yugoslavia.....	.15	.87	.52	44

<sup>1</sup> For letters and letter packages. Unless otherwise indicated, rate shown is per each  $\frac{1}{4}$  oz., and weight is limited to 4 lb., 6 oz. For rates for commercial papers, printed matter, samples of merchandise, small packages, 8-oz. merchandise packages, combination packages and articles grouped together, consult local postmaster. <sup>2</sup> Rate for 4 oz. or fraction thereof. <sup>3</sup> Rate for each additional 4 oz. or fraction thereof. <sup>4</sup> Parcels for Brazil exceeding 22 lb. accepted for following offices only: Belem (Para), Belo Horizonte, Florianopolis, Fortaleza, Manaus, Pelotas, Porto Alegre, Recife (Pernambuco), Rio de Janeiro, Rio Grande (Rio Grande do Sul), Salvador (Bahia), Santos and Sao Paulo. <sup>5</sup> Per oz.; post cards each 4c. <sup>6</sup> Articles limited to 60 lb. in weight. <sup>7</sup> Registered and ordinary articles in regular mails for Island of Formosa (Taiwan) will be accepted for air transmission to destination. Ordinary (unregistered) articles for all other destinations in China, including Manchuria and Mongolia, prepaid at air-mail rate will be accepted for transmission by air to Hong Kong and onward transmission by surface means. <sup>8</sup> Air parcel post for China is temporarily suspended; available only to Formosa (Taiwan). <sup>9</sup> Service to Cuba is limited to parcels weighing over 8 oz. and up to 22 lb. Cost for initial weight unit, which is over 8 oz. and up to 12 oz., is \$1.10. Each additional 4 oz. or fraction is 15c. Packages weighing 8 oz. or less must not have customs declarations or parcel post stickers attached. <sup>10</sup> Parcels for Honduras exceeding 22 lb. accepted for following offices only: Amapala, Comayagua, La Ceiba, Olanchito, Progreso, Puerto Castilla, Puerto Cortez, San Pedro Sula, Tegucigalpa and Tela. <sup>11</sup> Air parcels for Saudi Arabia limited to the following places only: Al Gaba, Al Lith, Al Wejh, Doha, Dammam, Dhahran, Hassa, Jiddah, Jizam, Katif, Khobar, Mecca, Medina, Qunfidha, Rabigh, Rastanurra, Riyadh, Umm Lej and Yenbo. <sup>12</sup> Limit to Chabba and Sakhad is 11 lb.; limit to Tel-Abiad and Yabroud is 22 lb. <sup>13</sup> Parcels for Lebanon exceeding 11 lb. not accepted for following offices: Air-Zhalta, Baito, Falougha, Hammama, Koubayat, Mauser-el-Chouf, Ras-Baalbeck and Souk-el-Gharb. <sup>14</sup> Parcels for many offices are limited to 22 lb. or 11 lb. Consult local postmaster for limitations. <sup>15</sup> Limit to Lisbon is 22 lb. NOTE: For rates to countries not shown in this table, consult local postmaster. Leaders (....) indicate that there is no air-parcel-post service to the country.

## BIOGRAPHIES OF THE PRESIDENTS

### GEORGE WASHINGTON

was born February 22, 1732 (February 11, 1731/2, old style) in Westmoreland County, Virginia. He early trained as a surveyor; but in 1752 he was appointed adjutant in the Virginia militia, and for the next three years he took an active part in the wars against the French and Indians, serving as General Braddock's aide in the disastrous campaign against Fort Duquesne. In 1759 he resigned from the militia, married Martha Dandridge Custis, a widow, and settled down as a gentleman farmer at Mount Vernon.

As a militiaman, he had been exposed to the arrogance of the British officers, and his experience as a planter with British commercial restrictions increased his anti-British sentiment. He opposed the Stamp Act of 1765 and after 1770 became increasingly prominent in organizing resistance. A delegate to the Continental Congress, Washington was selected as commander in chief of the Continental Army and took command at Cambridge, Massachusetts, on July 3, 1775.

Inadequately supported and sometimes covertly sabotaged by the Congress, in charge of troops who were inexperienced, badly equipped and impatient of discipline, Washington conducted the war on the policy of avoiding major engagements with the British and wearing them down by harassing tactics. His able generalship, along with the French alliance and the growing weariness within Britain, brought the war to a conclusion with the surrender of Cornwallis at Yorktown on October 19, 1781.

The chaotic years under the Articles of Confederation led Washington to return to public life in the hope of promoting the formation of a strong central government. He presided over the Constitutional Convention and yielded to the universal demand that he serve as first President. In office, he sought to unite the nation in the service of establishing the authority of new government at home and abroad. Greatly distressed by the emergence of the Hamilton-Jefferson rivalry, he worked to maintain neutrality but actually sympathized more with Hamilton. Following his unanimous re-election in 1792, his second term was dominated by the Federalists. His Farewell Address rebuked party spirit and warned against foreign entanglements.

He died at Mt. Vernon on December 14, 1799. Tall, dignified and impressive, Washington gave a public impression of austerity, though he was capable of gaiety in private. His life was characterized by a

strict sense of duty to his people. The standard biographies are by Fitzpatrick, Ford, Hughes and Stephenson.

### JOHN ADAMS

was born on October 30 (October 19, old style), 1735, at Braintree (now Quincy), Massachusetts. A Harvard graduate, he considered teaching and the ministry but finally turned to law and was admitted to the bar in 1758. He opposed the Stamp Act, served as lawyer for patriots indicted by the British and, by the time of the Continental Congresses, was in the vanguard of the movement for independence. In 1778 he went to France as commissioner. Subsequently he helped negotiate the peace treaty with Britain, and in 1785 became the U. S. envoy to London. Resigning in 1788, he was elected Vice President under Washington, and was re-elected in 1792.

Though a Federalist, Adams did not get along with Hamilton who sought to prevent his election to the presidency in 1796, and thereafter intrigued against his administration. Adams was chosen with 71 electoral votes to 68 for his closest competitor, Thomas Jefferson, who became Vice President. In 1798 Adams' independent policy averted a war with France but completed the break with Hamilton and the right-wing Federalists while, at the same time, the enactment of the Alien and Sedition Acts, directed against foreigners and against critics of the government, exasperated the Jeffersonian opposition. The split between Adams and Hamilton elected Jefferson in 1800. Adams retired to his home in Quincy, Massachusetts. He later corresponded with Jefferson and they died on the same day, July 4, 1826.

Stout, somewhat vain and irascible, Adams was honest, fearless and essentially fair-minded. His *Defence of the Constitutions of Government of the United States* (1787) contains original and striking if conservative political ideas. He married Abigail Smith in 1764, and their life together was long and happy. The standard biographies are by Morse and Chinard.

### THOMAS JEFFERSON

was born on April 13 (April 2, old style), 1743, at Shadwell in Goochland (now Albemarle) County, Virginia. A William and Mary graduate, he studied law but from the start showed an interest in science and philosophy. His literary skill and political clarity brought him to the forefront

of the revolutionary movement in Virginia. As delegate to the Continental Congress, he drafted the Declaration of Independence. In 1776 he entered the Virginia House of Delegates and initiated a comprehensive reform program for the abolition of feudal survivals in land tenure and the separation of church and state.

In 1779 he became governor, but constitutional limitations on his power combined with his own lack of executive energy caused an unsatisfactory administration, culminating in Jefferson's virtual abdication when the British invaded Virginia in 1781. He now retired to his beautiful home at Monticello, to his wife, Martha Wayles Skelton, whom he had married in 1772 and who died in 1782, and to his children.

Jefferson's *Notes on Virginia* (1784-85) illustrate his many-faceted interests, his limitless intellectual curiosity, his deep faith in agrarian democracy. Sent to Congress in 1783, he helped lay down the decimal system and drafted basic reports on the organization of the western lands. In 1785 he was appointed minister to France, where the Anglo-Saxon liberalism he had drawn from Locke was stimulated by contact with the thought which would soon ferment in the French Revolution. In 1789 Washington appointed him Secretary of State. While favoring the Constitution and a strengthened central government, Jefferson came to believe that Hamilton contemplated the establishment of a monarchy. Growing differences resulted in Jefferson's resignation on Dec. 31, 1793.

Elected Vice President in 1796, Jefferson continued to serve as spiritual leader of the opposition to Federalism, particularly to the repressive Alien and Sedition Acts. He was elected President in 1801 by the House of Representatives as a result of Hamilton's decision to throw the Federalist votes to him rather than to Aaron Burr, who had tied him in electoral votes. The purchase of Louisiana from France in 1803, though in violation of his earlier constitutional scruples, was the most notable act of his administration. Re-elected in 1804 with 162 electoral votes to 14 for the Federalist Charles C. Pinckney, Jefferson tried desperately during his second term to keep the United States out of the Napoleonic Wars in Europe, employing to this end the unpopular embargo policy.

After his retirement to Monticello in 1809, he developed his interest in education, founding the University of Virginia and watching its development with never-flagging interest. He died at Monticello on July 4, 1826. Tall, loose-jointed, a poor speaker, Jefferson had an enormous variety of interests and skills, ranging from education and science to architecture and music. Economically his conception of democracy presupposed an essentially rural

community of small freeholds; but his deep and abiding faith in the common man provides inspiration for future generations. The standard biographies are by Chinard, Bowers, Kimball, Randall and Malone.

### JAMES MADISON

was born in Port Conway, Virginia, on March 16, 1751 (March 5, 1750/1, old style). A Princeton graduate, he joined the struggle for independence on his return to Virginia in 1771. In the seventies and eighties he was active both in state politics, where he championed the Jefferson reform program, and in the Continental Congress. He was influential in the Constitutional Convention as leader of the group favoring a strong central government and as recorder of the debates; and he subsequently wrote, in collaboration with Alexander Hamilton and John Jay, the *Federalist* papers to aid the campaign for the adoption of the Constitution.

In the new Congress, Madison soon emerged as the leader in the House of the men who opposed Hamilton's financial program and his pro-British leanings in foreign policy. Retiring from Congress in 1797, he continued active in Virginia and drafted the Virginia Resolution protesting the Alien and Sedition Acts. His intimacy with Jefferson made him natural choice for Secretary of State in 1801.

In 1809 Madison succeeded Jefferson as President, with 122 electoral votes to 47 for the Federalist, C. C. Pinckney, and 6 scattering. His attractive wife, Dolly Payne Todd, whom he married in 1794, brought a new social sparkle to the executive mansion. In the meantime, increasing tension with Britain culminated in the War of 1812—a war for which the United States was unprepared, and for which Madison lacked the executive talent to clear out incompetence and mobilize the nation's energies. Madison was re-elected in 1812, with 128 electoral votes to 89 for the Federalist, De Witt Clinton. In 1814 the British actually captured Washington and forced Madison to flee to Virginia.

In his domestic program, Madison capitulated to the Hamiltonian policies that he had resisted twenty years before, signing bills to establish a United States Bank and a higher tariff. Following his presidency, he remained in retirement in Virginia until his death on June 28, 1836. Small, wrinkled, unimpressive, Madison had an acute political intelligence but lacked executive force. The standard lives are by Hunt, Brant and Rives.

### JAMES MONROE

was born on April 28, 1758, in Westmoreland County, Virginia. A William and Mary graduate, he served in the army during



the first years of the Revolution and was wounded at Trenton. He then entered Virginia politics and later national politics under the sponsorship of Jefferson. In 1786 he married Eliza Kortright.

Fearing centralization, Monroe opposed the adoption of the Constitution and, as senator from Virginia, was highly critical of the Hamiltonian program. In 1794 he was appointed minister to France where his ardent sympathies with the Revolution exceeded the wishes of the State Department. A troubled diplomatic career ended with his recall in 1796. From 1799 to 1802 he was governor of Virginia. In 1803 Jefferson sent him to France to help negotiate the Louisiana Purchase and for the next few years he was active in various continental negotiations.

In 1808 Monroe flirted with the radical wing of the Republican party, which opposed Madison's candidacy; but the presidential boom came to naught and, after a brief term as governor of Virginia in 1811, Monroe accepted Madison's offer of the State Department. During the war he vainly sought a field command and served as Secretary of War from Sept., 1814, to Mar., 1815.

Elected President in 1816 with 183 electoral votes to 34 for the Federalist Rufus King, and re-elected without opposition in 1820, Monroe, the last of the Virginia dynasty, pursued the course of systematic tranquilization which won for his terms the name "the era of good feeling." He continued Madison's surrender to the Hamiltonian domestic program, signed the Missouri Compromise, acquired Florida and, with the able assistance of his Secretary of State, John Quincy Adams, promulgated the Monroe Doctrine in 1823, declaring against foreign colonization or intervention in the Americas. He died in New York City on July 4, 1831.

A sound man of medium abilities, Monroe possessed qualities of judgment rather than of leadership. The standard biographies are by Morgan, Gilman and Styron.

### JOHN QUINCY ADAMS

was born on July 11, 1767, at Braintree (now Quincy), Massachusetts, the son of John Adams. He spent his early years in Europe with his father, graduated from Harvard and entered law practice. His anti-Jeffersonian newspaper articles won him political attention. In 1794 he became minister to the Netherlands, the first of several diplomatic posts which occupied him until his return to Boston in 1801. In 1797 he married Louisa Catherine Johnson.

In 1803 he was elected to the Senate, nominally as a Federalist, but his repeated displays of independence on such issues as the Louisiana Purchase and the embargo caused his party to compel his resignation

and ostracize him socially. In 1809 Madison rewarded him for his support of Jefferson by appointing him minister to St. Petersburg. He helped negotiate the Treaty of Ghent in 1814 and in 1815 became minister to London. In 1817 Monroe appointed him Secretary of State where he served with great distinction, gaining Florida from Spain without hostilities and playing an equal part with Monroe in formulating the Monroe Doctrine.

When no presidential candidate received a majority of electoral votes in 1824, Adams, with the support of Henry Clay, was elected by the House in 1825 over Andrew Jackson who had the original plurality. Adams had ambitious plans of government activity to foster internal improvements and promote the arts and sciences; but congressional obstructionism combined with his own unwillingness or inability to play the role of a politician meant that little was accomplished. Retiring to Quincy after his defeat in 1828, he was elected to the House of Representatives in 1831 where, though nominally a Whig, he pursued as ever an independent course. He led the fight to force Congress to receive anti-slavery petitions and fathered the Smithsonian Institution.

Stricken on the floor of the House, he died on February 23, 1848. Tactless, brusque, conscientious, a rough and savage debater, Adams spared neither himself nor his enemies. His long and detailed *Diary* gives a unique picture of the personalities and politics of the times. The standard biographies are by Morse and Clark.

### ANDREW JACKSON

was born on March 15, 1767, in what is now generally agreed to be Waxhaw, South Carolina. After a turbulent boyhood as an orphan and a British prisoner, he moved west to Tennessee where he soon qualified for law practice but found time for such frontier pleasures as horse racing, cock-fighting and dueling. His marriage to Rachel Donelson Robards in 1791 was complicated by subsequent legal uncertainties about the status of her divorce. During the seventeen-nineties Jackson served in the Tennessee constitutional convention, the federal House of Representatives, the federal Senate and the Tennessee supreme court.

After some years as a country gentleman, living at the Hermitage near Nashville, Jackson in 1812 was given command of Tennessee troops sent against the Creeks. He defeated the Indians at Horseshoe Bend in 1814; subsequently he became a major general and won the Battle of New Orleans over veteran British troops though after the treaty of peace had been signed at Ghent. In 1818 General Jackson invaded Florida, captured Pensacola and hanged two Englishmen named Arbuthnot and

Ambrister, creating an international incident. A presidential boom began for him in 1821 and in its service he returned to the Senate (1823-25). Though he won a plurality of electoral votes in 1824, he lost in the House when Clay threw his strength to Adams; he won easily in 1828 by an electoral vote of 178 to 83.

As President, Jackson greatly expanded the power and prestige of the presidential office and carried through an unexampled program of domestic reform, vetoing the bill to extend the United States Bank, moving toward a hard-money currency policy and checking the program of federal internal improvements. He also vindicated federal authority against South Carolina with its doctrine of nullification and against France on the question of debts. The support given his policies by the workingmen of the East as well as by the farmers of the East, West and South resulted in his triumphant re-election in 1832 over Clay by an electoral vote of 219 to 49, with 18 scattering and 2 not cast.

After watching the inauguration of his hand-picked successor, Martin Van Buren, Jackson retired to the Hermitage where he maintained a lively interest in national affairs until his death on June 8, 1845. A tall, dignified man with a drawn and wrinkled face, Jackson has been endowed by partisan historians with a violence and irascibility he appears not to have possessed. His great contribution was to adjust the presidential office and the democratic doctrines of Jefferson to the new situation created by the Industrial Revolution. The standard biographies are by James, Bassett and Parton.

### MARTIN VAN BUREN

was born on December 5, 1782, at Kinderhook, New York. After graduating from the village school, he became a law clerk, entered practice in 1803 and soon became active in state politics as state senator and attorney general. In 1821 he was elected to the United States Senate. He threw the support of his efficient political organization, known as the Albany Regency, to William H. Crawford in 1824 and to Jackson in 1828. After leading the opposition to Adams' administration in the Senate, he served briefly as governor of New York and resigned to become Jackson's Secretary of State. He soon became on close personal terms with Jackson and played an important part in turning the Jacksonian program from the lines intended by his original Western backers.

In 1832 Van Buren became Vice President; in 1836, President, with an electoral vote of 170 against 124 scattered among four opponents. The Panic of 1837 overshadowed his term. He attributed it to

the overexpansion of the credit and favored the establishment of an independent treasury as repository for the federal funds. In 1840 he established a ten-hour day on public works. Defeated by Harrison in 1840, he was the leading contender for the Democratic nomination in 1844 until he publicly opposed immediate annexation of Texas and was subsequently beaten by the Southern delegations at the Baltimore convention. This incident increased his growing misgivings about the slave power.

After working behind the scenes among the antislavery Democrats, Van Buren joined in the movement which led to the Free-Soil party and became its candidate for President in 1848. He subsequently returned to the Democratic party while continuing to object to its pro-Southern policy. He died in Kinderhook on July 24, 1862. His *Autobiography* throws valuable sidelights on the political history of the times.

Small, erect, dapper, Van Buren had a reputation for slick politicking which won him such sobriquets as the Little Magician and the Red Fox of Kinderhook; but, as his later career showed, he was capable of taking firm and unpopular stands on public issues. His wife Hannah Hoes, whom he married in 1807, died in 1819.

The standard biographies are by Shepard and Lynch.

### WILLIAM HENRY HARRISON

was born in Charles City County, Virginia, on February 9, 1773. Joining the army in 1791, he was active in Indian fighting in the Northwest, became secretary of the Northwest Territory in 1798 and governor of Indiana in 1800. He married Anna Symmes in 1795. Growing discontent over white encroachments on Indian lands led to the formation of an Indian alliance under Tecumseh to resist further aggressions. In 1811 Harrison won a nominal victory over the Indians at Tippecanoe and in 1813 a more decisive one at the Battle of the Thames, where Tecumseh was killed.

After resigning from the army in 1814, Harrison had an obscure career in politics and diplomacy, ending up in twenty years as a county recorder in Ohio. Nominated for President in 1835 as a military hero whom the conservative politicians hoped to be able to control, he ran surprisingly well against Van Buren in 1836. Four years later he defeated Van Buren by an electoral vote of 234 to 60 but caught pneumonia and died in Washington a month after his inauguration, April 4, 1841. Harrison's qualities were those of a soldier rather than of a statesman or political leader. The standard biographies are by Cleaves and Goebel.



### JOHN TYLER

was born in Charles City County, Virginia, on March 29, 1790. A William and Mary graduate, he entered law practice and politics, serving in the House of Representatives (1816-21) and later as governor of Virginia (1825-27), and as senator. A thorough-going strict constructionist, he supported Crawford in 1824 and Jackson in 1828 but broke with Jackson over his Bank policy and became a member of the Southern state-rights group which co-operated with the Whigs. In 1836 he resigned from the Senate rather than follow instructions from the Virginia legislature to vote for a resolution expunging censure of Jackson from the Senate record.

Elected Vice President on the Whig ticket in 1840, Tyler succeeded to the presidency on Harrison's death. His strict-constructionist views soon caused a split with the Henry Clay wing of the Whig party and a stalemate on domestic questions. Tyler's more considerable achievements were his support of the Webster-Ashburton Treaty with Britain and his success in bringing about the annexation of Texas through joint congressional resolution.

After his presidency he lived in retirement in Virginia until the outbreak of the Civil War when he emerged briefly as chairman of a peace convention and then as delegate to the provisional Congress of the Confederacy. He died on January 18, 1862. He was married first to Letitia Christian March in 1813 and, two years after her death in 1842, to Julia Gardiner. Witty, amiable, courteous, Tyler was a Virginia gentleman whose presidency was hamstrung by the basic contradiction between his own ideas and those of the party which put him on the ticket as Vice President. The standard biographies are by Chitwood and Tyler.

### JAMES KNOX POLK

was born in Mecklenburg County, North Carolina, on November 2, 1795. A graduate of the University of North Carolina, he moved west to Tennessee, was admitted to the bar and soon became prominent in state politics. In 1825 he was elected to the House of Representatives where he opposed Adams and, after 1829, became Jackson's floor leader in the fight against the Bank. In 1835 he became Speaker of the House. In 1839 he was elected governor of Tennessee but was beaten in tries for re-election in 1841 and 1843.

The supporters of Van Buren for the Democratic nomination in 1844 counted on Polk as his running mate; but, when Van Buren's stand on Texas alienated Southern support, the convention swung to Polk on the ninth ballot. He was elected over Henry Clay, the Whig candidate, by an

electoral vote of 170 to 105. Rapidly disillusioning those who thought that he would not run his own administration, Polk proceeded steadily and precisely to achieve four major objectives—the acquisition of California, the settlement of the Oregon question, the reduction of the tariff and the establishment of the independent treasury. He also enlarged the Monroe Doctrine to exclude all non-American intervention in American affairs, whether forcible or not, and he forced Mexico into a war which he waged to a successful conclusion. His wife Sarah Childress, whom he married in 1824, was a woman of charm and ability. Polk died in Nashville, Tennessee, on June 15, 1849.

Serious, hardworking, lacking in color, Polk has long been underrated by historians who mistakenly regarded him as a slaveholders' puppet; in fact, few presidents have so thoroughly controlled their own administration or have so ably accomplished the purposes they set for themselves. Polk's *Diary* reflects the mood and problems of his presidency. The standard biography is by McCormac.

### ZACHARY TAYLOR

was born at Montebello, Orange County, Virginia, on November 24, 1784. Embarking on a military career in 1808, Taylor fought in the War of 1812, the Black Hawk War and the Seminole War, holding in between garrison jobs on the frontier or desk jobs in Washington. A brigadier general as a result of his victory over the Seminoles at Lake Okeechobee (1837), Taylor held a succession of Southwestern commands and in 1846 established a base on the Rio Grande, where his forces engaged in hostilities which precipitated the war with Mexico. He captured Monterrey in Sept., 1846, and, disregarding Polk's orders to stay on the defensive, defeated Santa Anna at Buena Vista in February, 1847, ending the war in the northern provinces.

Though Taylor had never cast a vote for President, his party affiliations were Whiggish, and his availability was increased by his difficulties with Polk. He was elected President over the Democrat Lewis Cass by an electoral vote of 163 to 127. During the revival of the slavery controversy, which was to result in the Compromise of 1850, Taylor began to take an increasingly firm stand against appeasing the South; but he died in Washington on July 9, 1850, in the midst of the fight over the Compromise. He married Margaret Mackall Smith in 1810. His bluff and simple soldierly qualities won him the name of Old Rough and Ready. During his brief term as President he displayed a growing insight into political questions. The standard biographies are by Hamilton and by Bent and McKinley.



### MILLARD FILLMORE

was born at Locke, Cayuga County, New York, on January 7, 1800. A lawyer, he entered politics as an Antimason under the sponsorship of Thurlow Weed, editor and party boss, and subsequently followed Weed into the Whig party. He served in the House of Representatives (1833-35 and 1837-43) and played a leading role in writing the tariff of 1842. Defeated for governor of New York in 1844, he became comptroller in 1848, was put on the Whig ticket with Taylor as a concession to the Clay wing of the party and became President upon Taylor's death in 1850.

As President, Fillmore broke with Weed and William H. Seward and associated himself with the pro-Southern Whigs, supporting the Compromise of 1850. Defeated for the Whig nomination in 1852, he ran for President in 1856 as candidate of the American or Know-Nothing party, which sought to unite the country against foreigners in the alleged hope of diverting it from the explosive slavery issue. Fillmore opposed Lincoln during the Civil War. He died in Buffalo on March 8, 1874. He was married in 1826 to Abigail Powers, who died in 1853, and in 1858 to Caroline Carmichael McIntosh. Urbane, gracious, colorless and weak, Fillmore was an undistinguished President. The standard biography is by Griffis.

### FRANKLIN PIERCE

was born at Hillsboro, New Hampshire, on November 23, 1804. A Bowdoin graduate and lawyer, he won rapid political advancement in the Democratic party, in part because of the prestige of his father, Governor Benjamin Pierce. By 1831 he was Speaker of the New Hampshire House of Representatives; from 1833 to 1837 he served in the federal House and from 1837 to 1842 in the Senate. His wife, Jane Means Appleton, whom he had married in 1834, disliked Washington and the somewhat dissipated life led by Pierce; and in 1842 Pierce, resigning from the Senate, took up a successful law practice in Concord, New Hampshire.

During the Mexican War Pierce was a brigadier general. Thereafter he continued to oppose antislavery tendencies within the Democratic party. As a result, he was the Southern choice to break the deadlock at the Democratic convention of 1852 and was nominated on the 49th ballot. Pierce rolled up 254 electoral votes to 42 for Winfield Scott, the Whig candidate.

As President, Pierce followed a course of appeasing the South at home and of playing with schemes of territorial expansion abroad. The failure of both his foreign and domestic policies prevented his renomination; and he died in Concord, New Hampshire, on October 8, 1869, in relative ob-

scurity. A kindly and courteous person, Pierce was weak, unstable and lacking in presidential qualities. The standard biography is by Nichols.

### JAMES BUCHANAN

was born near Mercersburg, Pennsylvania, on April 23, 1791. A Dickinson graduate and a lawyer, he entered Pennsylvania politics as a Federalist. With the disappearance of the Federalist party, he became a Jacksonian Democrat. He served with ability in the House (1821-31), as minister to St. Petersburg (1832-33) and in the Senate (1834-45), and in 1845 became Polk's Secretary of State. Disappointed in the presidential nomination in 1852, Buchanan became minister to Britain in 1853 where he participated with other American diplomats in Europe in drafting the expansionist Ostend Manifesto.

In 1856 Buchanan received the Democratic nomination and won the election, gaining 174 electoral votes to 114 for John C. Frémont, the Republican candidate, and 8 for Millard Fillmore, American party. The growing crisis over slavery presented Buchanan with problems he lacked the will to tackle. His appeasement of the South alienated the Stephen Douglas wing of the Democratic party without reducing Southern militancy on slavery issues. While denying the right of secession, Buchanan also denied that the federal government could do anything about it. He supported the administration during the Civil War and died in Lancaster, Pennsylvania, on June 1, 1868.

The only President to remain a bachelor throughout his term, Buchanan used his charming niece Harriet Lane as White House hostess. Legalistic, indecisive and timorous as President, Buchanan filled his other public offices capably. The standard biography is by Curtis.

### ABRAHAM LINCOLN

was born in Hardin (now Larue) County, Kentucky, on February 12, 1809. His family moved to Indiana and then to Illinois, and Lincoln gained what education he could along the way. While reading law, he worked in a store, managed a mill, surveyed, and split rails. In 1834 he went to the state legislature as a Whig and became the party's floor leader. For the next twenty years he remained in law practice in Springfield, except for a single term (1847-49) in Congress where he denounced the Mexican War. In 1855 he was a candidate for senator and in 1856 he joined the new Republican party.

A leading but unsuccessful candidate for the vice-presidential nomination with Frémont, Lincoln gained national attention in 1858 when, as Republican candidate for

senator from Illinois, he engaged in a series of debates with Stephen A. Douglas, the Democratic candidate. He lost the senatorial election, but continued to prepare the way for the 1860 Republican convention and was rewarded with the presidential nomination on the third ballot. He polled 180 electoral votes, as against the 123 of his three opponents, but had only a plurality of the popular vote.

From the start, Lincoln made clear that, unlike Buchanan, he believed the national government had the power to crush the rebellion. Not an abolitionist, he held the slavery issue subordinate to that of preserving the Union but soon perceived that the war could not be brought to a successful conclusion without freeing the slaves. His administration was hampered by the incompetence of many Union generals, the inexperience of the troops and the harassing political tactics both of the Republican Radicals, who favored a hard policy toward the South, and the Democratic Copperheads, who desired a negotiated peace. The Gettysburg Address of November 19, 1863, marks the high point in the record of American eloquence. His patient search for a winning combination finally brought Generals Ulysses S. Grant and William T. Sherman to the top; and their series of victories in 1864 dispelled the mutterings from both Radicals and Peace Democrats which at one time seemed to threaten Lincoln's re-election. He received 212 electoral votes to 21 for George B. McClellan, the Democratic candidate. His inaugural address urged leniency toward the South: "With malice toward none, with charity for all . . . let us strive on to finish the work we are in; to bind up the nation's wounds . . ." This policy aroused growing opposition on the part of the Republican Radicals, but Lincoln was shot by John Wilkes Booth at Ford's Theater, Washington, on April 14, 1865, before the matter could be put to test. He died the following day.

Lincoln's marriage to Mary Todd in 1842 was often unhappy and turbulent, in part because of his wife's pronounced instability. By his remarkable literary artistry, his essential patience and devotion, his profound sense of the importance of government by, for and of the people, by the manner of his life and of his death, Lincoln has won a unique place in the hearts of Americans. The standard biographies are by Sandburg, Herndon, Nicolay and Hay.

### ANDREW JOHNSON

was born at Raleigh, North Carolina, on December 29, 1808. Self-educated, he became a tailor in Greeneville, Tennessee, but soon went into politics where he rose steadily. From 1843 to 1853 he served in the House of Representatives, 1853-57 as governor of Tennessee and in 1857 was

elected Senator. Politically he was a Jacksonian Democrat, and his specialty was the fight for a more equitable land policy. Alone among the Southern Senators, he stood by the Union during the Civil War. In 1862 he became war governor of Tennessee and carried out a thankless and difficult job with great courage. Johnson became Lincoln's running mate in 1864 as result of an attempt to give the ticket a nonpartisan and nonsectional character. Succeeding to the presidency on Lincoln's death, Johnson sought to carry out his policy but without his political skill. The result was a hopeless conflict with the Radical Republicans who dominated Congress, passed measures over Johnson's vetoes and attempted to limit the power of the executive concerning appointments and removals. The conflict culminated with Johnson's impeachment for attempting to remove his disloyal Secretary of War in defiance of the Tenure of Office Act which required senatorial concurrence for such dismissals. The opposition failed by one vote to get the two-thirds necessary for conviction.

After his presidency, Johnson maintained an interest in politics and in 1875 was elected to the Senate. He died near Carter Station, Tennessee, on July 31, 1875. He married Eliza McCordle in 1827. An honest, courageous and intelligent man, Johnson lacked the tact, patience and self-control to be an effective President.

The standard biographies are by Winston, Stryker and Milton.

### ULYSSES SIMPSON GRANT

was born (as Hiram Ulysses Grant) at Point Pleasant, Ohio, on April 27, 1822. He finished West Point in 1843 and served without particular distinction in the Mexican War. In 1848 he married Julia Dent. He resigned from the army in 1854, following warnings from his commanding officer about his drinking habits, and for the next six years held a wide variety of jobs in the Middle West. With the outbreak of the Civil War, he sought a command and soon, to his surprise, was made a brigadier general. His continuing successes in the western theaters, culminating in the capture of Vicksburg in 1863, brought him national fame and soon the command of all the Union armies. His dogged, implacable policy of concentrating on dividing and destroying the Confederate armies brought the war to an end in 1865. In 1866 he was made full general.

Grant's relations with Johnson grew steadily worse; and in 1868, as the Republican candidate for President, Grant was elected with 214 electoral votes to 80 for the Democrat Horatio Seymour. From the start Grant showed his unfitness for the office. His cabinet was weak, his do-



mestic policy was confused, many of his intimate associates were corrupt. The notable achievement in foreign affairs was the settlement of controversies with Great Britain in the Treaty of London (1871), negotiated by his able Secretary of State, Hamilton Fish.

Nominated for a second term, he defeated Horace Greeley, the Democratic and Liberal Republican candidate, 286 votes to 63. The Panic of 1873 created difficulties for his second term.

After retiring from office, Grant toured Europe for two years and returned in time to accede to a third-term boom, but was beaten in the convention of 1880. Illness and bad business judgment darkened his last years, but he worked steadily at the *Personal Memoirs* which were to be so successful when published after his death at Mount McGregor, near Saratoga, New York, on July 23, 1885. Inarticulate, taciturn, loyal to his friends, he was an able general who should never have accepted the presidency. The standard biographies are by Hesselstine and Woodward.

### RUTHERFORD BIRCHARD HAYES

was born at Delaware, Ohio, on October 4, 1822. A graduate of Kenyon College and the Harvard Law School, he practiced law in Sandusky and then in Cincinnati, Ohio. In 1852 he married Lucy Webb. A Whig, he joined the Republican party in 1855. During the Civil War he rose to the rank of major general. He served in Congress from 1865 to 1867 and then confirmed a reputation for honesty and efficiency in two terms as governor of Ohio. His re-election as governor in 1875 made him the logical candidate for those Republicans who wished to stop James G. Blaine in 1876, and he was successfully nominated.

The result of the election was for some time in doubt and hinged upon disputed returns from South Carolina, Louisiana, Florida and Oregon. Samuel J. Tilden, the Democratic candidate, had the larger popular vote but was adjudged by the strictly partisan decisions of the Electoral Commission to have one less electoral vote, 185 to 184. The national acceptance of this result was due in part to the general understanding that Hayes would pursue a conciliatory policy toward the South. He withdrew the troops from the South, took a conservative position on financial and labor issues and urged civil service reform.

Hayes served only one term by his own wish and spent the rest of his life in various humanitarian endeavors. He died in Fremont, Ohio, on January 17, 1893. A hard-working, conscientious, sensible man, Hayes represented the best type of Republican of his day. The standard biographies are by Eckenrode and Williams.

### JAMES ABRAM GARFIELD,

the last President to be born in a log cabin, was born at Cuyahoga County, Ohio, on November 19, 1831. A Williams graduate, he taught school for a time and entered Republican politics in Ohio. In 1858 he married Lucretia Rudolph. During the Civil War he had a promising career, rising to the rank of major general of volunteers; but in 1863 he was elected to the House of Representatives where he served until 1880. His oratorical and parliamentary abilities soon made him the leading Republican in the House, though his record was marred by his unorthodox acceptance of a fee in the DeGolyer paving contract case and by suspicions of his complicity in the *Crédit Mobilier* scandal.

In 1880 Garfield was elected to the Senate, but instead became the presidential candidate on the 36th ballot as a result of a deadlock in the Republican convention. He gained 214 electoral votes to 155 for General Winfield Scott Hancock, the Democratic candidate. Garfield's administration was barely under way when he was shot by Charles J. Guiteau, a disappointed office seeker, in July. He died in Elberon, New Jersey, on September 19, 1881. An attractive and eloquent man, he was much beloved in his day.

The standard biographies are by Smith and Caldwell.

### CHESTER ALAN ARTHUR

was born at Fairfield, Vermont, on October 5, 1830. A graduate of Union College, he became a successful New York lawyer. In 1859 he married Ellen Herndon. During the Civil War he held administrative jobs in the Republican state administration and in 1871 was appointed collector of the Port of New York by Grant. This post gave him control over considerable patronage; and, though not personally corrupt, Arthur managed his power in the interests of the New York machine so openly that President Hayes in 1877 called for an investigation, and in 1878 Arthur was suspended from his responsibilities.

In 1880 Arthur was nominated for Vice President in the hope of conciliating the followers of Grant and the powerful New York machine. As President on Garfield's assassination, Arthur, stepping out of his familiar role as spoilsman, backed civil service reform, reorganized the cabinet and prosecuted political associates accused of post office graft. Losing machine support and failing to gain the reformers, he was not renominated. He died in New York City on November 18, 1886. A tall, handsome, dignified man with real administrative abilities, he was a better President than his previous record promised. The standard biography is by Howe.



## STEPHEN GROVER CLEVELAND

was born at Caldwell, New Jersey, on March 18, 1837. He was admitted to the bar in Buffalo, New York, in 1859 and lived there as a lawyer, with occasional incursions into Democratic politics, for more than twenty years. He did not participate in the Civil War. As mayor of Buffalo in 1881, he carried through a reform program so ably that the Democrats ran him successfully for governor in 1882. In 1884 he won the Democratic nomination for President. The campaign contrasted Cleveland's spotless public career with the uncertain record of James G. Blaine, the Republican candidate, and Cleveland received enough Mugwump (Independent Republican) support to win by 219 to 182 electoral votes.

As President, Cleveland pushed civil service reform, opposed the pension grab and attacked the high tariff rates. While in the White House he married Frances Folsom (1886). Renominated in 1888, Cleveland was defeated by Benjamin Harrison, polling more popular but fewer electoral votes. In 1892 he was re-elected over Harrison, 277 to 145, with 22 votes for James B. Weaver, the Populist candidate. When the Panic of 1893 burst upon the country, Cleveland's attempts to solve it by sound-money measures alienated the free-silver wing of the party, while his tariff policy alienated the protectionists. In 1894 he sent troops to break the Pullman strike. In foreign affairs his firmness caused Great Britain to back down in the Venezuela border dispute.

In his last years Cleveland was an active and much respected public figure. He died in Princeton, New Jersey, on June 24, 1908. An honest, stubborn, high-principled man, Cleveland was an old-fashioned liberal in the nineteenth-century sense who was baffled by the new problems of industrial society. The standard biographies are by Nevins and McElroy.

## BENJAMIN HARRISON

was born in North Bend, Ohio, on August 20, 1833, the grandson of William Henry Harrison. A graduate of Miami University, he took up the law in Indiana and became active in Republican politics. In 1853 he married Caroline Lavinia Scott. During the Civil War he rose to the rank of brigadier general. A sound-money Republican, he was elected senator from Indiana in 1880 and in 1888 received the Republican nomination for President on the 8th ballot. Though behind on the popular vote, he won over Grover Cleveland in the electoral college by 233 to 168.

As President, Benjamin Harrison failed to please either the bosses or the reform element in the party. In foreign affairs he backed Secretary of State Blaine whose policy foreshadowed later American im-

perialism. In 1892 Harrison was renominated, but Cleveland beat him in the election. His wife died in the White House in 1892, and Harrison married her niece, Mary Scott (Lord) Dimmick, in 1896. After his presidency, he resumed law practice. He died in Indianapolis, Indiana, on March 13, 1901. Harrison was an honest man of very medium abilities.

## WILLIAM MCKINLEY

was born in Niles, Ohio, on January 29, 1843. A graduate of Allegheny College, he rose from the ranks to become a major in the Civil War. Subsequently he opened a law office in Canton, Ohio, and in 1871 married Ida Saxton. Elected to Congress in 1876, he served there steadily till 1891, except for 1883-85. His faithful advocacy of business interests culminated in the passage of the highly protective McKinley Tariff of 1890. With the support of Mark Hanna, a shrewd Cleveland businessman interested in safeguarding tariff protection, McKinley became governor of Ohio in 1892 and Republican presidential candidate in 1896. The business community, alarmed by the progressivism of William Jennings Bryan, the Democratic candidate, spent considerable money to assure McKinley's victory which was by the margin of 271 to 176 in the electoral college.

The chief event of McKinley's administration was the war with Spain which resulted in our acquisition of the Philippines and other islands. With imperialism as an issue, McKinley defeated Bryan again in the election of 1900 by 292 to 155. On September 6, 1901, he was shot at Buffalo by Leon F. Czolgosz, an anarchist, and he died there on September 14.

The standard biography is by Olcott.

## THEODORE ROOSEVELT

was born in New York City on October 27, 1858. A Harvard graduate, he was early interested in ranching, in politics and in writing picturesque historical narratives. He was a Republican member of the New York Assembly in 1882-84, an unsuccessful candidate for mayor of New York in 1886, a U. S. Civil Service Commissioner under Harrison, Police Commissioner of New York City in 1895 and Assistant Secretary of the Navy under McKinley in 1897. After exuding a belligerence which helped bring on the war with Spain, he resigned in 1898 to help organize a volunteer regiment named the Rough Riders and take a more direct part in the war. Always publicity-shrewd, he won the New York gubernatorial nomination in 1898 in spite of pronounced lack of enthusiasm on the part of the bosses.

After two years of T.R. in Albany, the New York bosses succeeded in getting him the vice-presidential nomination in 1900.

Roosevelt accepted it with reluctance, feeling that his career had been ruined. As President on McKinley's assassination, he perceived the new popular mood of progressivism and initiated a policy of trust busting, designed to control giant corporations. He also strengthened government powers over interstate commerce and launched a conservation program to save natural resources. In foreign affairs he pursued a truculent policy, permitting the instigation of a revolt in Panamá to dispose of Colombian objections to the Panama Canal and helping to maintain the balance of power in the East by bringing the Russo-Japanese war to an end. In 1904 he decisively defeated Alton B. Parker, his conservative Democratic opponent, by an electoral margin of 336 to 140.

Following his second term he went big-game hunting in Africa and toured Europe. On his return to the United States, his increasing coldness toward Taft led him to overlook his earlier disclaimer of third-term ambitions and to re-enter politics. Defeated by the machine in the Republican convention of 1912, he organized the Progressive party and polled more votes than Taft, though the split brought about the election of Wilson. From 1915 on, Roosevelt strongly favored intervention in the European war. He became deeply embittered at Wilson's refusal to allow him to raise a volunteer division. He died in Oyster Bay, New York, on January 6, 1919. He was married twice: in 1880 to Alice Hathaway Lee, who died in 1884; and in 1886 to Edith Kermit Carow.

The athletic advocate of the strenuous life, with his high voice, prominent teeth and thick glasses, Roosevelt captured the imagination of the American people. He was one of the great personalities of American history. The standard biography is by Pringle.

### WILLIAM HOWARD TAFT

was born in Cincinnati, Ohio, on September 15, 1857. A Yale graduate, he entered Ohio Republican politics in the eighteen eighties. In 1886 he married Helen Herron. From 1887 to 1890, he served on the Ohio superior court; 1890-92, as solicitor general of the United States; 1892-1900, on the federal circuit court. In 1900 McKinley appointed him president of the Philippine Commission and in 1901 governor general. Taft had great success in pacifying the Filipinos, solving the problem of the church lands, improving economic conditions and establishing limited self-government. His period as Secretary of War 1904-08 further demonstrated his capacity as administrator and conciliator; and he was Roosevelt's hand-picked successor in 1908.

In the election he polled 321 electoral votes to 162 for William Jennings Bryan.

As President, though he carried on many of Roosevelt's policies, Taft got into increasing trouble with the progressive wing of the party and displayed mounting irritability and indecision. After his defeat in 1912, he became professor of constitutional law at Yale. In 1921 he was appointed Chief Justice of the United States. He died in Washington on March 8, 1930. Enormously large, deliberate and good-humored, Taft excelled as an administrator and judge, not as a political leader.

The standard biography is by Pringle.

### THOMAS WOODROW WILSON

was born in Staunton, Virginia, on December 28, 1856. A Princeton graduate, he turned from law practice to post-graduate work in political science at Johns Hopkins University, receiving his Ph.D. in 1886. He taught at Bryn Mawr, Wesleyan and Princeton, and in 1902 was made president of Princeton. After an unsuccessful attempt to democratize the social life of Princeton, he welcomed an invitation in 1910 to be the Democratic gubernatorial candidate in New Jersey. His success in fighting the machine and putting through a reform program attracted national attention.

In 1912, after a protracted contest at Baltimore, Wilson won the Democratic nomination on the 46th ballot. In the election he received 435 electoral votes to 88 for Roosevelt and 8 for Taft. During his first term Wilson proceeded under the standard of the New Freedom to enact a program of domestic reform, including the Federal Reserve Act, the Clayton Anti-trust Act, the establishment of the Federal Trade Commission and other measures designed to restore competition in the face of the great monopolies. In foreign affairs, while privately sympathetic with the Allies, he strove to maintain strict neutrality in the European war and warned both sides against encroachments on American interests.

Re-elected in 1916 as a peace candidate, he tried to mediate between the warring nations; but, when the Germans resumed unrestricted submarine warfare in 1917, Wilson brought the United States into what he now believed was a war to make the world safe for democracy. He supplied the classic formulations of Allied war aims; and the armistice of November, 1918, was negotiated on the basis of Wilson's Fourteen Points. In 1919 he strove at Versailles to lay the foundations for enduring peace. He accepted the imperfections of the Versailles Treaty in the expectation that they could be remedied by action within the



League of Nations. He probably could have secured ratification of the treaty if he had adopted a more conciliatory attitude toward the mild reservationists; but his insistence on all or nothing eventually caused the diehard isolationists and diehard Wilsonites to unite in rejecting a compromise.

In September, 1919, Wilson suffered a paralytic stroke which limited his future activity. After the presidency he lived on in retirement in Washington, dying February 3, 1924. He was married twice—in 1885 to Ellen Louise Axson, who died in 1914, and in 1915 to Edith Bolling Galt. A man of high principle, inspiring eloquence and great intellectual ability, Wilson was the first leader to fire the imagination of the masses of the world with the vision of world peace. The standard biography is by Baker.

### WARREN GAMALIEL HARDING

was born in Morrow County, Ohio, on November 2, 1865. After attending Ohio Central College, Harding became interested in journalism and in 1884 bought the *Marion (Ohio) Star*. In 1891 he married a wealthy widow, Florence Kling De Wolfe. As his paper prospered, he entered Republican politics, serving as state senator (1899–1903), and as lieutenant governor (1904–06). In 1910 he was defeated for governor but in 1914 was elected to the Senate. His reputation as orator made him keynoter in the 1916 convention.

When the 1920 Republican convention was deadlocked between Leonard Wood and Frank O. Lowden, Harding was made the dark-horse nominee on his solemn affirmation that there was no reason in his past that he should not be. Straddling the League question, Harding was elected easily, with 404 electoral votes to 127 for James M. Cox, his Democratic opponent. His cabinet contained some able men, but also some manifestly unfit for public office. Harding's own intimates were mediocre when they were not corrupt. The impending disclosure of scandals in the Interior and Justice departments and in the Veterans' Bureau, as well as political setbacks, profoundly worried him. On his return from Alaska in 1923, he died suddenly at San Francisco on August 2. A handsome and genial man, indiscriminating in his associates, lacking in political ideas or fortitude, Harding was totally unfitted for the presidency.

### JOHN CALVIN COOLIDGE

was born in Plymouth, Vermont, on July 4, 1872. An Amherst graduate, he went into law practice at Northampton, Massachusetts, in 1897. He married Grace Anna Goodhue in 1905. He entered Republican

state politics, becoming successively mayor of Northampton, state senator, lieutenant governor and, in 1919, governor. His conduct in regard to the Boston police strike in 1919 won him a somewhat undeserved reputation for decisive action and brought him the Republican vice-presidential nomination in 1920. After Harding's death Coolidge handled the Washington scandals with care and finally managed to save the Republican party from public blame for the widespread corruption.

In 1924 Coolidge won re-election without difficulty, getting 382 electoral votes to 136 for the Democrat, John W. Davis, and 13 for Robert M. La Follette running on the Progressive ticket. His second term, like his first, was characterized by a general satisfaction with the existing economic order. He stated that he did not choose to run in 1928.

After his presidency, Coolidge lived quietly in Northampton, writing an unilluminating *Autobiography* and conducting a syndicated column. He died in Northampton, Massachusetts, on January 5, 1933. His dry, Yankee humor, his frugality and glumness made him a paradoxically popular President in the boom period. The standard biographies are by White and Fuess.

### HERBERT CLARK HOOVER

was born at West Branch, Iowa, an August 10, 1874. A Stanford graduate, he worked from 1895 to 1913 as a mining engineer and consultant in North America, Europe, Asia, Africa and Australia. In 1899 he married Lou Henry. During the First World War he served with distinction as chairman of the American Relief Committee in London, as chairman of the Commission for Relief in Belgium and as United States Food Administrator. His political affiliations were still sufficiently indeterminate for him to be mentioned as a possibility for both Republican and Democratic nominations in 1920; but after the election he served both Harding and Coolidge as Secretary of Commerce.

In the election of 1928 Hoover received 444 electoral votes to 87 for Alfred E. Smith, the Democratic candidate. He soon faced the worst depression in the nation's history; but his attacks upon it were hampered by his devotion to the theory that the forces which brought the crisis would soon bring the revival, and then by his belief that in too many areas the federal government had no power to act. In a succession of vetoes he struck down measures proposing a national employment system or national relief; he reduced income tax rates; and only at the end of his term did he yield to popular pressure and set up agencies such as the Reconstruction Finance Corporation to make emergency loans to assist business.



After his 1932 defeat, Hoover returned to private business. In 1946, President Truman charged him with various world food missions; and from 1947-49, he was head of the Commission on Organization of the Executive Branch of the Government. In 1953, he became head of the Committee on Government Operations.

### FRANKLIN DELANO ROOSEVELT

was born in Hyde Park, New York, on January 30, 1882. A Harvard graduate, he attended Columbia Law School and was admitted to the New York bar. In 1910 he was elected to the New York state senate as a Democrat. Re-elected in 1912, he was appointed Assistant Secretary of the Navy by Woodrow Wilson in 1913. In 1920 his radiant personality and his war services resulted in his nomination for Vice President as James M. Cox's running mate. After his defeat, he returned to law practice in New York. In August, 1921, Roosevelt was stricken with infantile paralysis while at Campobello, New Brunswick. After a long and gallant fight against the disease he recovered partial use of his legs. In 1924 and 1928 he led the fight at the Democratic national conventions for the nomination of Governor Alfred E. Smith of New York; and in 1928 Roosevelt was himself induced to run for governor of New York. He was elected and was re-elected in 1930.

In 1932 Roosevelt received the Democratic nomination for President and immediately launched a campaign which brought new spirit to a weary and discouraged nation. He won the election over Herbert Hoover by a margin of 472 to 59 in the electoral college. His first term was characterized by an unfolding of the New Deal program, with greater benefits for labor, the farmers and the unemployed, and the progressive estrangement of most of the business community.

At an early stage Roosevelt became aware of the menace to world peace involved in the existence of totalitarian fascism, and from 1937 on he tried to focus public attention on the trend of events in Europe and Asia. As a result he was widely denounced as a warmonger. He was re-elected in 1936 over Alfred M. Landon by the overwhelming electoral margin of 523 to 8; and the gathering international crisis caused him to decide to run again in 1940. He defeated Wendell L. Willkie, 449 to 82.

Roosevelt's program to bring maximum aid to Britain and, after June, 1941, to Russia was opposed, until the Japanese attack on Pearl Harbor restored national unity. During the war Roosevelt shelved the New Deal in the interests of conciliating the business community, both in order to get full production during the war and to prepare the way for a united

acceptance of the peace settlements after the war. A series of conferences with Winston Churchill and Joseph Stalin laid down the bases for the postwar world. In 1944 he was elected to a fourth term, running against Governor Thomas E. Dewey.

On April 12, 1945, Roosevelt died at Warm Springs, Georgia, shortly after his return from the Yalta Conference. His wife, Anna Eleanor Roosevelt, whom he married in 1905, is a woman of great ability who made significant contributions to her husband's policies. No President has been faced with so many staggering responsibilities, both at home and abroad.

### HARRY S. TRUMAN

was born on a farm near Lamar, Missouri, on May 8, 1884. During the First World War he served in France with the 129th Field Artillery. After engaging briefly and unsuccessfully in the haberdashery business in Kansas City, Truman entered local politics. Under the sponsorship of Thomas Pendergast, Democratic boss of Missouri, he held a number of local offices, preserving his personal honesty in the midst of a notoriously corrupt political machine. In 1934 he was elected to the Senate and was re-elected in 1940. During his first term he was a loyal but quiet supporter of the New Deal; but in the course of his second term, an appointment as head of a Senate committee to investigate war production brought out his special qualities of honesty, common sense and hard work, and he won widespread respect.

Elected Vice President in 1944, Truman became President upon Roosevelt's death in 1945 and immediately had to face complex postwar problems, both domestic and foreign. His first attempts did not meet with marked success, and the Republicans won control of Congress in 1946. The next two years were distinguished by the Truman Doctrine, the Marshall Plan and civil-rights proposals; and his general record, highlighted by a vigorous Fair Deal campaign, brought about his unexpected and impressive re-election in 1948.

Truman's second term was primarily concerned with the Cold War with the Soviet Union, the implementing of the North Atlantic Pact, the United Nations police action in Korea, and the vast rearmament program with its accompanying problems of economic stabilization.

On Mar. 29, 1952, Truman announced that he would not run again for the Presidency. He campaigned actively for Adlai E. Stevenson. After Eisenhower's inauguration, Truman returned to his Independence, Missouri, home to write his memoirs covering the period 1935-53. He further busied himself with the organization of the Harry S. Truman Library in Grandview, Missouri.

### DWIGHT DAVID EISENHOWER

was born in Denison, Texas, on October 14, 1890. His ancestors lived in Germany, and emigrated to America, settling in Pennsylvania, early in the 18th century. His father, David, had a general store in Hope, Kansas, which failed. After a brief time in Texas, the family moved to Abilene, Kansas, when young Dwight was about a year old.

After graduating from Abilene High School in 1909, Dwight Eisenhower did odd jobs for almost two years. He won an appointment to the Naval Academy at Annapolis, but it turned out that he was too old for admittance. Then he received an appointment in 1910 to West Point. He was graduated as a second lieutenant in 1915.

To his regret, he did not see service in World War I, having been assigned to the 19th Infantry at Fort Sam Houston, Texas. There he met Mamie Geneva Doud, whom he married in Denver on July 1, 1916. Their first son died in infancy. Their second son is Major John Sheldon Doud Eisenhower.

Eisenhower's dearest wish in his Army career was to be given a combat command, but the Army recognized his administrative talents and kept him in staff posts.

A paper he wrote about 1930 attracted the attention of General Douglas MacArthur, then Chief of Staff, who asked that Eisenhower be assigned to his office. When MacArthur went to the Philippines as military adviser in 1935, Eisenhower accompanied him and remained with him until 1939.

General George C. Marshall brought him into the War Department General Staff and, in 1942, put him in command of the Allied invasion of North Africa. In 1944, Eisenhower was made Supreme Allied Commander of the invasion of Europe.

After the war, Eisenhower served as Army Chief of Staff from November 1945 until February 1948, when he was appointed president of Columbia University. His book *Crusade in Europe* sold more than 800,000 copies and brought him \$635,000.

In December 1950, President Truman recalled Eisenhower to active duty to command the North Atlantic Treaty Organization forces in Europe. He held this post until the end of May 1952.

In the Republican Convention of July 1952 in Chicago, Eisenhower won the Presidential nomination on the first ballot in a close race with Senator Robert A. Taft of Ohio. In November, he won the election, defeating Adlai E. Stevenson by an electoral vote of 442 to 89.

## How to Number the Presidents

Is President Eisenhower the 33rd President? Or is he the 34th?

The difficulty started with Grover Cleveland. He became our 22nd President back in 1885. Then came Benjamin Harrison, who was obviously the 23rd President, serving from 1889-93. At this point, Cleveland returned to the White House for a second (but nonconsecutive) term.

Cleveland was still the same man who had been our 22nd President. But in his later term, it would look silly—some folks thought—to continue to call him our 22nd President. That would make the 22nd President follow the 23rd. Numbers should go in order—so ran the argument—and Cleveland should therefore be designated both as the 22nd President in his first term and as the 24th in his second term.

The people who argued the other way found an eloquent spokesman in John Kieran. He said: "Write down the names of all the Presidents, and you will only get 33. If you write Cleveland twice, you'll get 34—but in that case you've got to write Franklin D. Roosevelt's name four times. Until they prove to me that Grover Cleveland was two men, Eisenhower can't be the 34th President."

The *Congressional Directory*, which must be considered the official final authority, grappled with the problem of numbering the Presidents. Until recent years, it has followed John Kieran's theory: it listed Cleveland as the 22nd President, but not as the 24th. No number was given to his second term. On that reckoning, Harry S. Truman was inaugurated, according to the *Congressional Directory*, the 32nd President in 1949. Cautiously, the *Directory* printed: "NOTE: The figures indicate the number of persons who have served as President. . . ."

After the election of President Truman, and before the election of President Eisenhower, the *Congressional Directory* changed its official mind. In the current issue, Truman is the 33rd President, and Eisenhower is listed as the 34th. (Cleveland has two numbers—22nd and 24th.)

In conformity with officialdom, the *Information Please Almanac* is now recording the numbers of the Presidents in the same manner as the *Congressional Directory*. But we can't help thinking of John Kieran's remark: "put the busts of all the Presidents in a row and count them and you'll get 33 and only 33."



## Presidents and Vice Presidents of the U. S.

President & (party)	Born	State of birth	Religion	Died	Term	Age at inaug.	Age at death	Vice Presidents <sup>2</sup>	State of birth
1. Washington (F) <sup>2</sup>	Feb. 22, 1732	Va.	Episcopalian	Dec. 14, 1799	1789-1797	57	67	1. John Adams	Mass.
2. J. Adams (F)	Oct. 30, 1735	Mass.	Unitarian	July 4, 1826	1797-1801	61	90	2. Thomas Jefferson <sup>4</sup>	Va.
3. Jefferson (DR)	Apr. 13, 1743	Va.	Deist	July 4, 1826	1801-1809	57	83	3. Aaron Burr	N. J.
4. Madison (DR)	Mar. 16, 1751	Va.	Episcopalian	June 28, 1836	1809-1817	57	85	4. George Clinton	N. Y.
5. Monroe (DR)	Apr. 28, 1758	Va.	Episcopalian	July 4, 1831	1817-1825	58	73	5. Elbridge Gerry <sup>5</sup>	Mass.
6. J. Q. Adams (DR)	July 11, 1767	Mass.	Unitarian	Feb. 23, 1848	1825-1829	57	80	6. Daniel D. Tompkins	N. Y.
7. Jackson (D)	Mar. 15, 1767	S. C.	Presbyterian	June 8, 1845	1829-1837	61	78	7. John C. Calhoun	N. C.
8. Van Buren (D)	Dec. 5, 1782	N. Y.	Reformed Dutch	July 24, 1862	1837-1841	54	79	8. Martin Van Buren	N. Y.
9. W. H. Harrison (W) <sup>3</sup>	Feb. 9, 1773	Va.	Episcopalian	Apr. 4, 1841	1841-1841	68	68	9. Richard M. Johnson	N. Y.
10. Tyler (W)	Mar. 29, 1790	Va.	Episcopalian	Jan. 18, 1862	1841-1845	51	71	10. John Tyler	Ky.
11. Polk (D)	Nov. 2, 1795	N. C.	Methodist	June 15, 1849	1845-1849	49	53	11. George M. Dallas	Va.
12. Taylor (W) <sup>3</sup>	Nov. 24, 1784	Va.	Episcopalian	July 9, 1850	1849-1850	64	65	12. Millard Fillmore	Pa.
13. Fillmore (W)	Jan. 7, 1800	N. Y.	Episcopalian	Mar. 8, 1874	1850-1855	50	74	13. William R. King <sup>6</sup>	N. Y.
14. Pierce (D)	Nov. 23, 1804	N. H.	Episcopalian	Oct. 8, 1869	1853-1857	48	64	14. John C. Breckinridge	N. C.
15. Buchanan (D)	Apr. 23, 1791	Pa.	Presbyterian	June 1, 1868	1857-1861	65	77	15. Hannibal Hamlin	Ky.
16. Lincoln (R) <sup>10</sup>	Feb. 12, 1809	Ky.	Liberal	Apr. 15, 1865	1861-1865	52	56	16. Andrew Johnson <sup>17</sup>	Maine
7. Johnson (U) <sup>17</sup>	Dec. 29, 1808	N. C.	( <sup>19</sup> )	July 31, 1875	1865-1869	56	66	17. Schuyler Colfax	N. Y.
8. Grant (R)	Apr. 27, 1822	Ohio	Methodist	July 23, 1885	1869-1877	46	63	18. Henry Wilson <sup>11</sup>	N. H.
9. Hayes (R)	Oct. 4, 1822	Ohio	Methodist	Jan. 17, 1893	1877-1881	54	70	19. William A. Wheeler	N. Y.
10. Garfield (R) <sup>12</sup>	Nov. 19, 1831	Ohio	Disciples of Christ	Sept. 19, 1881	1881-1881	49	49	20. Chester A. Arthur	Vt.
11. Arthur (R)	Oct. 5, 1830	Vt.	Episcopalian	Nov. 18, 1886	1881-1885	50	56	21. Thomas A. Hendricks <sup>18</sup>	Ohio
12. Cleveland (D)	Mar. 18, 1837	N. J.	Presbyterian	June 24, 1908	1885-1889	47	71	22. Levi P. Morton	Ohio
13. Cleveland (R)	Aug. 20, 1833	Ohio	Presbyterian	Mar. 13, 1901	1889-1893	55	67	23. Adlai E. Stevenson	Ky.
14. McKinley (R) <sup>14</sup>	Jan. 29, 1843	Ohio	Methodist	Sept. 14, 1901	1893-1897	58	58	24. Garret A. Hobart <sup>16</sup>	N. J.
15. Roosevelt (R)	Oct. 27, 1858	N. Y.	Reformed Dutch	Jan. 6, 1919	1901-1909	42	60	25. Theodore Roosevelt	N. Y.
16. Taft (R)	Sept. 15, 1857	N. Y.	Unitarian	Mar. 8, 1930	1909-1913	51	72	26. Charles W. Fairbanks	Ohio
17. Wilson (D)	Dec. 28, 1856	Va.	Presbyterian	Feb. 3, 1924	1913-1921	56	67	27. James S. Sherman <sup>15</sup>	N. Y.
18. Harding (R) <sup>8</sup>	Nov. 2, 1865	Ohio	Baptist	Aug. 2, 1923	1921-1923	55	57	28. Thomas R. Marshall	Ind.
19. Coolidge (R)	July 4, 1872	Vt.	Congregationalist	Jan. 5, 1933	1923-1929	51	60	29. Calvin Coolidge	Vt.
20. Hoover (R)	Aug. 10, 1874	Iowa	Quaker	Apr. 12, 1945	1929-1933	54	63	30. Charles G. Dawes	Ohio
21. F. D. Roosevelt (D) <sup>9</sup>	Jan. 30, 1882	N. Y.	Episcopalian	Apr. 12, 1945	1933-1945	51	63	31. Charles Curtis	Kans.
22. Truman (D)	May 8, 1884	Mo.	Baptist	Jan. 1, 1953	1945-1953	60	62	32. John N. Garner	Tex.
23. Eisenhower (R)	Oct. 14, 1890	Tex.	Presbyterian	Jan. 1, 1953	1945-1953	60	62	33. Henry A. Wallace	Iowa
								34. Harry S. Truman	Mo.
								35. Alben W. Barkley	Ky.
								36. Richard M. Nixon	Calif.



## U. S. Military Actions Other Than Declared Wars

**HAWAII (1893):** U. S. Marines, ordered to land by U. S. Minister Stevens, aided the revolutionary Committee of Safety in overthrowing the native government. Stevens then proclaimed Hawaii a U. S. protectorate. Annexation, resisted by the Democratic regime in Washington, was not formally accomplished until 1898.

**CHINA (1900):** Boxers (a group of Chinese revolutionists) occupied Peking and laid siege to foreign legations. U. S. troops joined an international expedition which relieved the city.

**PANAMA (1903):** After Colombia had rejected a proposed agreement for relinquishing sovereignty over the Panama Canal Zone, revolution broke out, aided by promoters of the Panama Canal Co. Two U. S. warships were standing by to protect American privileges. The U. S. recognized the Republic of Panama on Nov. 6.

**DOMINICAN REPUBLIC (1904):** When the Dominican Republic failed to meet debts owed to the U. S. and foreign creditors, Theodore Roosevelt declared the U. S. intention of exercising "international police power" in the Western Hemisphere whenever necessary. The U. S. accordingly administered customs and managed debt payments of the Dominican Republic from 1905-07.

**NICARAGUA (1911):** The possibility of foreign control over Nicaragua's canal route

lead to U. S. intervention and agreement. The U. S. landed Marines in Nicaragua (Aug. 14, 1912) to protect American interests there. A small detachment remained until 1933.

**MEXICO (1914):** Mexican Dictator Huerta, opposed by President Wilson, had the support of European governments. An incident involving unarmed U. S. sailors in Tampico lead to the landing of U. S. forces on Mexican soil. Vera Cruz was bombarded by the Navy to prevent the landing of munitions from a German vessel. At the point of war, both powers agreed to mediation by Argentina, Brazil and Chile. Huerta abdicated, and Carranza succeeded to the presidency.

**HAITI (1915):** U. S. Marines interposed a military occupation. Haiti signed a treaty making it a virtual protectorate of the U. S. until troops were withdrawn in 1934.

**MEXICO (1916):** Raids by Pancho Villa cost American lives on both sides of the border. President Carranza consented to a punitive expedition lead by Gen. Pershing, but antagonism grew in Mexico. Wilson withdrew the U. S. force when war with Germany became imminent.

**DOMINICAN REPUBLIC (1916):** Renewed intervention in the Dominican Republic with internal administration by U. S. naval officers lasted until 1924.

## Annual Salaries of Federal Officials

President of the U. S. ....	\$100,000 <sup>1</sup>	Secretaries of the Army, Navy, Air Force. ....	18,000
Vice President of the U. S. ....	30,000 <sup>2</sup>	Senators and Representatives. ....	12,500 <sup>3</sup>
Cabinet members. ....	22,500	Speaker of the House. ....	30,000 <sup>2</sup>
Undersecretaries of executive departments. ....	17,500	Chief Justice of the Supreme Court. ....	25,500
Deputy Secretary of Defense. ....	20,000	Associate Justices of the Supreme Court. ....	25,000

<sup>1</sup> Plus taxable \$50,000 for expenses and a nontaxable sum (not to exceed \$40,000 a year) for traveling and official entertainment expenses. <sup>2</sup> Plus nontaxable \$10,000 for expenses. <sup>3</sup> Plus nontaxable \$2,500 for expenses. NOTE: All salaries shown above are taxable.

## Footnotes for Table on Opposite Page

<sup>1</sup> F—Federalist; DR—Democratic-Republican; D—Democratic; W—Whig; R—Republican; U—Union. <sup>2</sup> Same party as President, except as indicated. <sup>3</sup> No party for first election. The party system in the U. S. made its appearance during Washington's first term. <sup>4</sup> Democratic-Republican. <sup>5</sup> Died in office Apr. 20, 1812. <sup>6</sup> Died in office Nov. 23, 1814. <sup>7</sup> Resigned Dec. 28, 1832, to become U. S. Senator. <sup>8</sup> Died in office. <sup>9</sup> Died in office Apr. 18, 1853. <sup>10</sup> Died in office (shot Apr. 14 by John Wilkes Booth). <sup>11</sup> Died in office Nov. 22, 1875. <sup>12</sup> Died in office (shot July 2 by Charles J. Guiteau). <sup>13</sup> Died in office Nov. 25, 1885. <sup>14</sup> Died in office (shot Sept. 6 by Leon F. Czolgosz). <sup>15</sup> Died in office Nov. 21, 1899. <sup>16</sup> Died in office Oct. 30, 1912. <sup>17</sup> The Republican National Convention of 1861 adopted the name Union party. It renominated Lincoln for President; for Vice President it nominated Johnson, a War Democrat. Although frequently listed as a Republican Vice President and President, Johnson undoubtedly considered himself strictly a member of the Union party. When that party broke apart after 1868, he returned to the Democratic party. <sup>18</sup> Johnson was not a professed church member; however, he admired the Baptist principles of church government.

## Wives of the Presidents of the United States

President	Wife's name	Year and place of birth	Married	Died	Sons	Daughters
Washington	Mrs. Martha Dandridge Custis	1732, Va.	1759	1802	..	..
John Adams	Abigail Smith	1744, Mass.	1764	1818	3	2
Jefferson	Mrs. Martha Wayles Skelton	1748, Va.	1772	1782	1	5
Madison	Mrs. Dorothy "Dolly" Payne Todd	1772, N. C.	1794	1849	..	..
Monroe	Eliza Kortright	1768, N. Y.	1786	1830	..	2
J. Q. Adams	Louisa Catherine Johnson	1775, England	1797	1852	3	1
Jackson	Mrs. Rachel Donelson Robards	1767, Va.	1791	1828	..	..
Van Buren	Hannah Hoes	1783, N. Y.	1807	1819	4	..
W. H. Harrison	Anna Symmes	1775, N. J.	1795	1864	6	4
Tyler	Letitia Christian	1790, Va.	1813	1842	3	4
	Julia Gardiner	1820, N. Y.	1844	1889	5	2
Polk	Sarah Childress	1803, Tenn.	1824	1891	..	..
Taylor	Margaret Smith	1788, Md.	1810	1852	1	5
Fillmore	Abigail Powers	1798, N. Y.	1826	1853	1	1
	Mrs. Caroline Carmichael McIntosh	1813, N. J.	1858	1881	..	..
Pierce	Jane Means Appleton	1806, N. H.	1834	1863	3	..
Buchanan	(Unmarried)	....	....	....	..	..
Lincoln	Mary Todd	1818, Ky.	1842	1882	4	..
Johnson	Eliza McCordle	1810, Tenn.	1827	1876	3	2
Grant	Julia Dent	1826, Mo.	1848	1902	3	1
Hayes	Lucy Ware Webb	1831, Ohio	1852	1889	7	1
Garfield	Lucretia Rudolph	1832, Ohio	1858	1918	5	2
Arthur	Ellen Lewis Herndon	1837, Va.	1859	1880	2	1
Cleveland	Frances Folsom	1864, N. Y.	1886	1947	2	3
B. Harrison	Caroline Lavinia Scott	1832, Ohio	1853	1892	1	1
	Mrs. Mary Scott Lord Dimmick	1858, Pa.	1896	1948	..	1
McKinley	Ida Saxton	1847, Ohio	1871	1907	..	2
T. Roosevelt	Alice Hathaway Lee	1861, Mass.	1880	1884	..	1
	Edith Kermit Carow	1861, Conn.	1886	1948	4	1
Taft	Helen Herron	1861, Ohio	1886	1943	2	1
Wilson	Ellen Louise Axson	1860, Ga.	1885	1914	..	3
	Mrs. Edith Bolling Galt	1872, Va.	1915	....	..	..
Harding	Mrs. Florence Kling DeWolfe	1860, Ohio	1891	1924	..	..
Coolidge	Grace Anna Goodhue	1879, Vt.	1905	....	2	..
Hoover	Lou Henry	1875, Iowa	1899	1944	2	..
F. D. Roosevelt	Anna Eleanor Roosevelt	1884, N. Y.	1905	....	5	1
Truman	Bess Wallace	1885, Mo.	1919	....	..	1
Eisenhower	Mamie Geneva Doud	1896, Iowa	1916	....	2	..

## National Committee Chairmen Since 1916

Source: Republican and Democratic National Committees.

Chairman and (state)	Term	Chairman and (state)	Term
Republican		Republican (Contd.)	
William R. Willcox (N. Y.)	1916-18	C. Wesley Roberts (Kans.)	1953-53
Will Hays (Ind.)	1918-21	Leonard W. Hall (N. Y.)	1953-
John T. Adams (Iowa)	1921-24	Democratic	
William M. Butler (Mass.)	1924-28	Vance McCormick (Pa.)	1916-19
Hubert Work (Colo.)	1928-29	Homer Cummings (Conn.)	1919-20
Claudius H. Huston (Tenn.)	1929-30	George White (Ohio)	1920-21
Simeon D. Fess (Ohio)	1930-32	Cordell Hull (Tenn.)	1921-24
Everett Sanders (Ind.)	1932-34	Clem Shaver (W. Va.)	1924-28
Henry P. Fletcher (Pa.)	1934-36	John J. Raskob (N. Y.)	1928-32
John Hamilton (Kans.)	1936-40	James A. Farley (N. Y.)	1932-40
Joseph W. Martin, Jr. (Mass.)	1940-42	Edward J. Flynn (N. Y.)	1940-43
Harrison E. Spangler (Iowa)	1942-44	Frank C. Walker (Mont.)	1943-44
Herbert Brownell, Jr. (N. Y.)	1944-46	Robert E. Hannegan (Mo.)	1944-47
Carroll Reece (Tenn.)	1946-48	J. Howard McGrath (R. I.)	1947-49
Hugh D. Scott, Jr. (Pa.)	1948-49	William M. Boyle, Jr. (Mo.)	1949-51
Guy G. Gabrielson (N. J.)	1949-52	Frank E. McKinney (Ind.)	1951-52
Arthur E. Summerfield (Mich.)	1952-53	Stephen A. Mitchell (Ill.)	1952-

Republican National Committee: 1625 I St., Washington 6, D. C.

Democratic National Committee: 1001 Connecticut Ave., Washington 6, D. C.

## Government Departments and Agencies

Source: U.S. Government Manual.

(Unless otherwise indicated, addresses shown are in Washington, D.C.)

### Executive Office of the President

#### THE WHITE HOUSE OFFICE

1600 Pennsylvania Ave., NW.

*Activities:* Serves President in performance of activities incident to his office.

#### BUREAU OF THE BUDGET

Executive Office Bldg.

*Established:* June 10, 1921.

*Activities:* Assists President in preparing budget and formulating fiscal program; supervises administration of budget; co-ordinates advice on proposed legislation; plans improvements in statistical services; keeps President informed of progress of activities by government agencies so that Congressional appropriations are spent most economically.

#### NATIONAL SECURITY COUNCIL (NSC)

Executive Office Bldg.

*Members:* 6. *Established:* July 26, 1947.

*Activities:* Assesses and appraises objectives, commitments and risks of U. S. in relation to our actual and potential military power in interests of national security. Central Intelligence Agency advises NSC on all intelligence matters. Operations Coordinating Board provides for integrated implementation of national security policies.

#### COUNCIL OF ECONOMIC ADVISERS (CEA)

Executive Office Bldg.

*Members:* 3. *Established:* Feb. 20, 1946.

*Activities:* Assists President in preparation of economic reports to Congress; studies economic trends; appraises government activities on nation's economy; recommends economic policies.

#### OFFICE OF DEFENSE MOBILIZATION (ODM)

Executive Office Bldg.

*Established:* 1953.

*Activities:* Advises President on co-ordination of military, industrial and civilian mobilization.

### Executive Departments

#### DEPARTMENT OF STATE

21st St. & Virginia Ave., NW.

*Established:* 1781 as Department of Foreign Affairs; reconstituted, 1789, following adoption of Constitution; name changed to Department of State Sept. 15, 1789.

*Activities:* Determines government policy in relation to international problems; formulates measures for promoting friendship with other countries; develops policies and programs for U. S. participation in U. N. and other international organizations; conducts correspondence with our representa-

tives abroad and with accredited foreign representatives here.

#### DEPARTMENT OF THE TREASURY

15th St. & Pennsylvania Ave., NW.

*Established:* Sept. 2, 1789.

*Activities:* Manages national finances; grants warrants for money drawn from Treasury pursuant to legal appropriations; handles collection of revenue; keeps and renders public accounts; prepares plans for improvement of revenue and for support of public credit; reports annually to Congress on condition of public finances; controls coinage and printing of money; administers Coast Guard, Bureau of Narcotics and Secret Service.

#### DEPARTMENT OF DEFENSE

The Pentagon

*Established:* July 26, 1947, as National Military Establishment; name changed to Department of Defense on Aug. 10, 1949. Subordinate to Secretary of Defense are Secretaries of Army, Navy, Air Force.

*Activities:* Provides for security of U. S. by establishing integrated policies and procedures; co-ordinates and directs the activities of 3 separately administered military departments (Army, Navy, Air Force).

#### DEPARTMENT OF JUSTICE

Constitution Ave. & 9th St., NW.

*Established:* Office of Attorney General was created Sept. 24, 1789. Although he was one of original Cabinet members, he was not executive department head until June 22, 1870, when Department of Justice was established.

*Activities:* Provides means for enforcing Federal laws; investigates and detects violations; represents U. S. in legal matters generally and gives advice and opinions when requested by President or heads of executive departments; directs FBI and Bureau Prisons.

#### POST OFFICE DEPARTMENT

12th St. & Pennsylvania Ave., NW.

*Established:* Office of Postmaster General and temporary post office system created Sept. 22, 1789. Act of Feb. 20, 1792, made detailed provisions for Post Office Department. Postmaster General became Cabinet member in 1829. Department received executive status June 8, 1872.

*Activities:* Maintains Postal Service of U. S. and executes all laws relative to it; negotiates, subject to approval of President, postal treaties with foreign governments.

#### DEPARTMENT OF THE INTERIOR

Dept. of the Interior Bldg.

*Established:* Mar. 3, 1849.



**Activities:** Develops and conserves natural resources of U. S. and territories; supervises public business relating to such offices as General Land Office, Bureau of Reclamation, Geological Survey, Office of Indian Affairs, National Park Service, Bureau of Mines, Division of Territories and Island Possessions, etc.

#### DEPARTMENT OF AGRICULTURE

12th St. & The Mall, SW.

**Established:** May 15, 1862. Administered by Commissioner of Agriculture until Feb. 9, 1889, when it was made executive department and office of Secretary was created.

**Activities:** Conducts comprehensive research and educational program relating to agriculture; provides crop reports, commodity standards, meat inspection and other marketing services; administers national forests; aids in flood control; administers price-support and production-adjustment programs; makes loans to farmers.

#### DEPARTMENT OF COMMERCE

14th St. & Constitution Ave., NW.

**Established:** Department of Commerce and Labor was created Feb. 14, 1903. On Mar. 4, 1913, all labor activities were transferred out of Department of Commerce and Labor and it was renamed Department of Commerce.

**Activities:** Fosters and develops foreign and domestic commerce of U. S.; maintains Bureau of the Census, Civil Aeronautics Administration, Coast and Geodetic Survey, Maritime Administration, Inland Waterways Corp., Patent Office, Bureau of Public Roads, National Bureau of Standards, Weather Bureau, etc.

#### DEPARTMENT OF LABOR

14th St. & Constitution Ave., NW.

**Established:** Bureau of Labor was created in 1884 under Department of the Interior; later became independent department without executive rank. Returned to bureau status in Department of Commerce and Labor, but on Mar. 4, 1913, became independent executive department under its present name.

**Activities:** Promotes welfare of wage earners of U. S.; improving their working conditions and advancing their opportunities for profitable employment; directs collection and collation of statistics concerning labor conditions; promulgates and enforces certain maximum-hour, minimum-wage, child-labor, safety and health stipulations in connection with government supply contracts; investigates labor matters pertaining to children.

#### DEPARTMENT OF HEALTH, EDUCATION AND WELFARE

4th St. & Independence Ave., SW.

**Established:** Apr. 11, 1953, replacing Federal Security Agency, which was created Apr. 25, 1939.

**Activities:** Supervises and co-ordinates various organizations within the department. Organizations are: Food and Drug Administration, Office of Education, Office of Vocational Rehabilitation, Public Health Service, St. Elizabeths Hospital, Social Security Administration; also following Federally owned corporations: American Printing House for the Blind, Gallaudet College and Howard University.

#### Independent Agencies

##### ATOMIC ENERGY COMMISSION (AEC)

19th St. & Constitution Ave., NW.

**Members:** 5. **Established:** Aug. 1, 1946.

**Activities:** Promotes Federally conducted and private research and development; controls dissemination of information and ownership and use of fissionable and fusionable materials.

##### CIVIL AERONAUTICS BOARD (CAB)

Dept. of Commerce Bldg.

**Members:** 5. **Established:** June 30, 1940.

**Activities:** Regulates economic aspects of U. S. air carrier operation; prescribes safety standards; investigates and analyzes aircraft accidents; assists in development of international air transportation.

##### FEDERAL COMMUNICATIONS COMMISSION (FCC)

Post Office Dept. Bldg.

**Members:** 7. **Established:** 1934.

**Activities:** Regulates interstate and foreign communications by wire and radio, including amateur radio and TV; regulates operator's licenses; classifies radio stations and prescribes their services; enforces use of radio for safety purposes on U. S. ships.

##### FEDERAL RESERVE SYSTEM (FRS), BOARD OF GOVERNORS OF

20th St. & Constitution Ave., NW.

**Members:** 7. **Established:** Dec. 23, 1913.

**Activities:** Supervises Federal Reserve banks; influences credit conditions; regulates open-market operations; issues Federal Reserve notes.

##### FEDERAL TRADE COMMISSION (FTC)

6th St. & Pennsylvania Ave., NW.

**Members:** 5. **Established:** Sept. 26, 1914.

**Activities:** Prevents unfair competition, deceptive practices, false advertising, price discrimination, monopolies.

##### HOUSING AND HOME FINANCE AGENCY (HHFA)

1626 K St., NW.

**Established:** July 27, 1947.

**Activities:** Provides single agency responsible for principal housing programs and

functions of Federal government; supervises and co-ordinates activities of Federal National Mortgage Association (FNMA), Federal Home Loan Bank, Federal Housing Administration (FHA) and Public Housing Administration (PHA).

#### INTERSTATE COMMERCE COMMISSION (ICC)

12th St. & Constitution Ave., NW.

*Members:* 11. *Established:* Feb. 4, 1887.

*Activities:* Regulates railroads, motor carriers, water carriers and freight forwarders as to rates, through-routes, services and bills of lading; authorizes mergers or consolidations; authorizes issue of securities by carriers.

#### NATIONAL LABOR RELATIONS BOARD (NLRB)

3rd & C Sts., SW.

*Members:* 5. *Established:* July 5, 1935.

*Activities:* Prevents unfair labor practices by employers or labor organizations; conducts secret ballots among employees to determine their choice of bargaining representatives.

#### SECURITIES AND EXCHANGE COMMISSION (SEC)

425 2nd St., NW.

*Members:* 5. *Established:* June 6, 1934.

*Activities:* Registers and issues regulations for securities and exchanges; registers securities offered for public sale; penalizes violators of regulations subject to appeal to U. S. Court of Appeals.

#### SMALL BUSINESS ADMINISTRATION (SBA)

811 Vermont Ave., NW.

*Established:* July 30, 1953.

*Activities:* Assists small firms by direct loans up to \$150,000 each; makes loans to victims of flood and disaster; promotes fuller use of private sources of credit and capital.

#### TENNESSEE VALLEY AUTHORITY (TVA)

New Sprankle Bldg., Knoxville, Tenn.

*Members:* 3. *Established:* May 18, 1933.

*Activities:* Provides navigable channel and flood control of Tennessee River and some of its larger tributaries; disposes of surplus electric power; improves, increases and cheapens fertilizer production.

#### U. S. CIVIL SERVICE COMMISSION (CSC)

8th & F Sts., NW.

*Members:* 3. *Established:* Jan. 16, 1883.

*Activities:* Provides examinations to test fitness of applicants for positions in competitive service; provides personnel in response to requests from appointing officers; investigates applicants for national security purposes; classifies positions; maintains service records.

#### U. S. TARIFF COMMISSION

8th & E Sts., NW.

*Members:* 6. *Established:* Sept. 8, 1916.

*Activities:* Investigates customs laws, unfair competition and foreign and domestic manufacturing costs; surveys domestic and foreign industries.

#### VETERANS' ADMINISTRATION (VA)

H St. & Vermont Ave., NW.

*Established:* July 21, 1930.

*Activities:* Administers laws authorizing benefits for veterans and for their dependents or beneficiaries. Included are hospitalization, pensions, insurance, loans, education, etc.

#### GOVERNMENT OFFICIALS

(As of July, 1, 1954)

##### Executive Office of the President

##### THE WHITE HOUSE OFFICE

*The Assistant to the President:* Sherman Adams

*The Deputy Assistant to the President:* Maj. Gen. Wilton B. Persons, USA (retired)

*Secretary to the President:* Thomas E. Stephens

*Press Secretary to the President:* James C. Hagerty

*Special Counsel to the President:* Bernard M. Shanley

##### BUREAU OF THE BUDGET

*Director:* Rowland R. Hughes

##### NATIONAL SECURITY COUNCIL

*Chairman:* Dwight D. Eisenhower, President of the U. S.

*Other members:* Richard M. Nixon, Vice President of the U. S.; John Foster Dulles, Secretary of State; Charles E. Wilson, Secretary of Defense; Harold E. Stassen, Director of Foreign Operations Administration; Arthur S. Flemming, Director of Office of Defense Mobilization.

*Director of Central Intelligence Agency:* Allen W. Dulles

*Chairman of Operations Coordinating Board:* Walter Bedell Smith

##### COUNCIL OF ECONOMIC ADVISERS

*Chairman:* Arthur F. Burns

*Other members:* Neil H. Jacoby; Walter W. Stewart

##### OFFICE OF DEFENSE MOBILIZATION

*Director:* Arthur S. Flemming

#### Executive Departments

##### DEPARTMENT OF STATE

*Secretary:* John Foster Dulles

*Under Secretary:* Herbert Hoover, Jr.

*Under Secretary for Administration:* Charles E. Saltzman

**DEPARTMENT OF THE TREASURY**

*Secretary:* George M. Humphrey  
*Under Secretary:* Marion B. Folsom

**DEPARTMENT OF DEFENSE**

*Secretary:* Charles E. Wilson  
*Deputy Secretary:* Robert B. Anderson  
*Secretary of the Army:* Robert T. Stevens  
*Secretary of the Navy:* Charles S. Thomas  
*Commandant, Marine Corps:* Gen. Lemuel C. Shepherd, Jr.  
*Secretary of the Air Force:* Harold E. Talbott  
*Joint Chiefs of Staff:* Adm. Arthur W. Radford, Chairman; Gen. Matthew B. Ridgway, Army; Adm. Robert B. Carney, Navy; Gen. Nathan F. Twining, Air Force.

**DEPARTMENT OF JUSTICE**

*Attorney General:* Herbert Brownell, Jr.  
*Deputy Attorney General:* William P. Rogers  
*Director of FBI:* J. Edgar Hoover

**POST OFFICE DEPARTMENT**

*Postmaster General:* Arthur E. Summerfield  
*Deputy Postmaster General:* Charles R. Hook, Jr.

**DEPARTMENT OF THE INTERIOR**

*Secretary:* Douglas McKay  
*Under Secretary:* Ralph A. Tudor

**DEPARTMENT OF AGRICULTURE**

*Secretary:* Ezra Taft Benson  
*Under Secretary:* True D. Morse

**DEPARTMENT OF COMMERCE**

*Secretary:* Sinclair Weeks  
*Under Secretary:* Walter Williams

**DEPARTMENT OF LABOR**

*Secretary:* James P. Mitchell  
*Under Secretary:* Arthur Larson

**DEPARTMENT OF HEALTH, EDUCATION AND WELFARE**

*Secretary:* Oveta Culp Hobby  
*Under Secretary:* Nelson A. Rockefeller

**Independent Agencies****ATOMIC ENERGY COMMISSION**

*Chairman:* Lewis L. Strauss  
*Other members:* Thomas E. Murray; Henry D. Smyth; Eugene M. Zuckert; Joseph Campbell

**CIVIL AERONAUTICS BOARD**

*Chairman:* Chan Gurney

**FEDERAL COMMUNICATIONS COMMISSION**

*Chairman:* Rosel H. Hyde

**FEDERAL RESERVE SYSTEM, BOARD OF GOVERNORS OF**

*Chairman:* William McC. Martin, Jr.

**FEDERAL TRADE COMMISSION**

*Chairman:* Edward F. Howrey

**HOUSING AND HOME FINANCE AGENCY**

*Administrator:* Albert M. Cole

**INTERSTATE COMMERCE COMMISSION**

*Chairman:* Richard F. Mitchell

**NATIONAL LABOR RELATIONS BOARD**

*Chairman:* Guy Farmer

**SECURITIES AND EXCHANGE COMMISSION**

*Chairman:* Ralph H. Demmler

**SMALL BUSINESS ADMINISTRATION**

*Administrator:* Wendell B. Barnes

**TENNESSEE VALLEY AUTHORITY**

*Chairman:* Gen. Herbert D. Vogel  
*Other members:* Harry A. Curtis; Raymond R. Paty

**U. S. CIVIL SERVICE COMMISSION**

*Chairman:* Philip Young

**U. S. TARIFF COMMISSION**

*Chairman:* Edgar B. Brossard

**VETERANS' ADMINISTRATION**

*Administrator:* H. V. Higley

**Highest Ranking Officers in the Armed Forces****ARMY**

*Generals of the Army:* George C. Marshall; Douglas MacArthur; Omar N. Bradley.  
*Generals:* J. Lawton Collins; Matthew B. Ridgway; John E. Hull; James A. Van Fleet (ret.); Alfred M. Gruenther; Maxwell D. Taylor; Charles L. Bolte; William M. Hoge.

**AIR FORCE**

*Generals:* Nathan F. Twining; Thomas D. White; Benjamin W. Chidlaw; Lauris Norstad; Curtis E. Le May; Otto P. Weyland.

**NAVY**

*Fleet Admirals:* William D. Leahy; Ernest J. King; Chester W. Nimitz.

*Admirals:* A. W. Radford; Robert B. Carney; William M. Fechteler; Donald B. Duncan; Felix B. Stump; Jerauld Wright.

**MARINE CORPS**

*General:* Lemuel C. Shepherd.  
*Lieutenant Generals:* Clifton B. Cates (ret.); Gerald C. Thomas; Franklin A. Hart (ret.); William O. Brice; Oliver P. Smith; Randolph McC. Pate.

**COAST GUARD**

*Vice Admiral:* Alfred C. Richmond.  
*Rear Admiral:* James A. Hirschfield.



## U. S. Cabinet Members with Dates of Appointment

Although the Constitution made no provision for a President's advisory group, the heads of the three executive departments (State, Treasury and War) and the Attorney General were organized by Washington into such a group; and by about 1793, the name "Cabinet" was applied to it. With the exception of the Attorney General up to 1870 and the Postmaster General from 1829-72, Cabinet members have been heads of executive departments, although other government officials may be called to sit in whenever necessary.

A Cabinet member is appointed by the President, subject to the confirmation of the Senate; and as his term is not fixed, he may be replaced at any time by the

President. At a change in Administration, it is customary for him to tender his resignation, but he remains in office until a successor is appointed.

The table of Cabinet members lists only those members who actually served after being duly commissioned. It does not include ad-interim appointments or cases where the appointee declined the office after appointment.

The dates shown are those of appointment. "Contd" indicates that the term continued from the previous Administration for a substantial amount of time. Those cases where the term continued for only a few days, until a new appointment could be made, are not indicated.

### WASHINGTON

#### Secretary of State

Thomas Jefferson..... 1789  
Edmund Randolph..... 1794  
Timothy Pickering..... 1795

#### Secretary of the Treasury

Alexander Hamilton..... 1789  
Oliver Wolcott, Jr..... 1795

#### Secretary of War

Henry Knox..... 1789  
Timothy Pickering..... 1795  
James McHenry..... 1796

#### Attorney General

Edmund Randolph..... 1789  
William Bradford..... 1794  
Charles Lee..... 1795

### J. ADAMS

#### Secretary of State

Timothy Pickering.... Contd  
John Marshall..... 1800

#### Secretary of the Treasury

Oliver Wolcott, Jr.... Contd  
Samuel Dexter..... 1801

#### Secretary of War

James McHenry..... Contd  
Samuel Dexter..... 1800

#### Attorney General

Charles Lee..... Contd

#### Secretary of the Navy

Benjamin Stoddert.... 1798

### JEFFERSON

#### Secretary of State

James Madison..... 1801

#### Secretary of the Treasury

Samuel Dexter..... Contd  
Albert Gallatin..... 1801

#### Secretary of War

Henry Dearborn..... 1801

#### Attorney General

Levi Lincoln..... 1801  
Robert Smith..... 1805  
John Breckinridge.... 1805  
Caesar A. Rodney..... 1807

#### Secretary of the Navy

Benjamin Stoddert... Contd  
Robert Smith..... 1801

### MADISON

#### Secretary of State

Robert Smith..... 1809  
James Monroe..... 1811

#### Secretary of the Treasury

Albert Gallatin..... Contd  
George W. Campbell.... 1814  
Alexander J. Dallas.... 1814  
William H. Crawford... 1816

#### Secretary of War

William Eustis..... 1809  
John Armstrong..... 1813  
James Monroe..... 1814  
William H. Crawford... 1815

#### Attorney General

Caesar A. Rodney..... Contd  
William Pinckney..... 1811  
Richard Rush..... 1814

#### Secretary of the Navy

Paul Hamilton..... 1809  
William Jones..... 1813  
B. W. Crowninshield... 1814

### MONROE

#### Secretary of State

John Quincy Adams... 1817

#### Secretary of the Treasury

William H. Crawford.. Contd

#### Secretary of War

John C. Calhoun..... 1817

#### Attorney General

Richard Rush..... Contd  
William Wirt..... 1817

#### Secretary of the Navy

B. W. Crowninshield... Contd  
Smith Thompson..... 1818  
Samuel L. Southard... 1823

#### Secretary of the Navy

John Branch..... 1829  
Levi Woodbury..... 1831  
Mahlon Dickerson..... 1834

### J. Q. ADAMS

#### Secretary of State

Henry Clay..... 1825

#### Secretary of the Treasury

Richard Rush..... 1825

#### Secretary of War

James Babour..... 1825  
Peter B. Porter..... 1828

#### Attorney General

William Wirt..... Contd

#### Secretary of the Navy

Samuel L. Southard... Contd

### VAN BUREN

#### Secretary of State

John Forsyth..... Contd

#### Secretary of the Treasury

Levi Woodbury..... Contd

#### Secretary of War

Joel R. Poinsett..... 1837

#### Attorney General

Benjamin F. Butler... Contd  
Felix Grundy..... 1838  
Henry D. Gilpin..... 1840

#### Postmaster General

Amos Kendall..... Contd  
John M. Niles..... 1840

#### Secretary of the Navy

Mahlon Dickerson... Contd  
James K. Paulding.... 1838

### JACKSON

#### Secretary of State

Martin Van Buren.... 1829  
Edward Livingston.... 1831  
Louis McLane..... 1833  
John Forsyth..... 1834

#### Secretary of the Treasury

Samuel D. Ingham.... 1829  
Louis McLane..... 1831  
William J. Duane..... 1833  
Roger B. Taney..... 1833  
Levi Woodbury..... 1834

#### Secretary of War

John H. Eaton..... 1829  
Lewis Cass..... 1831

#### Attorney General

John M. Berrien..... 1829  
Roger B. Taney..... 1831  
Benjamin F. Butler... 1833

#### Postmaster General<sup>1</sup>

William T. Barry..... 1829  
Amos Kendall..... 1835

### W. HARRISON

#### Secretary of State

Daniel Webster..... 1841

#### Secretary of the Treasury

Thomas Ewing..... 1841

#### Secretary of War

John Bell..... 1841

#### Attorney General

John J. Crittenden... 1841

#### Postmaster General

Francis Granger..... 1841

#### Secretary of the Navy

George E. Badger..... 1841

**TYLER**

## Secretary of State

Daniel Webster..... Contd  
 Abel P. Upshur..... 1843  
 John C. Calhoun..... 1844

## Secretary of the Treasury

Thomas Ewing..... Contd  
 Walter Forward..... 1841  
 John C. Spencer..... 1843  
 George M. Bibb..... 1844

## Secretary of War

John Bell..... Contd  
 John C. Spencer..... 1841  
 James M. Porter..... 1843  
 William Wilkins..... 1844

## Attorney General

John J. Crittenden..... Contd  
 Hugh S. Legare..... 1841  
 John Nelson..... 1843

## Postmaster General

Francis Granger..... Contd  
 Charles A. Wickliffe..... 1841

## Secretary of the Navy

George E. Badger..... Contd  
 Abel P. Upshur..... 1841  
 David Henshaw..... 1843  
 Thomas W. Gilmer..... 1844  
 John Y. Mason..... 1844

**POLK**

## Secretary of State

James Buchanan..... 1845  
 Secretary of the Treasury

Robert J. Walker..... 1845

## Secretary of War

William L. Marcy..... 1845

## Attorney General

John Y. Mason..... 1845  
 Nathan Clifford..... 1846  
 Isaac Toucey..... 1848

## Postmaster General

Cave Johnson..... 1845

## Secretary of the Navy

George Bancroft..... 1845  
 John Y. Mason..... 1846

**TAYLOR**

## Secretary of State

John M. Clayton..... 1849

## Secretary of the Treasury

William M. Meredith..... 1849

## Secretary of War

George W. Crawford..... 1849

## Attorney General

Reverdy Johnson..... 1849

## Postmaster General

Jacob Collamer..... 1849

## Secretary of the Navy

William B. Preston..... 1849

## Secretary of the Interior

Thomas Ewing..... 1849

**FILLMORE**

## Secretary of State

Daniel Webster..... 1850  
 Edward Everett..... 1852

## Secretary of the Treasury

Thomas Corwin..... 1850

## Secretary of War

Charles M. Conrad..... 1850

## Attorney General

John J. Crittenden..... 1850

## Postmaster General

Nathan K. Hall..... 1850  
 Samuel D. Hubbard..... 1852

## Secretary of the Navy

William A. Graham..... 1850  
 John P. Kennedy..... 1852

## Secretary of the Interior

Thos. M. T. McKennon..... 1850  
 Alex. H. H. Stuart..... 1850

**PIERCE**

## Secretary of State

William L. Marcy..... 1853

## Secretary of the Treasury

James Guthrie..... 1853

## Secretary of War

Jefferson Davis..... 1853

## Attorney General

Caleb Cushing..... 1853

## Postmaster General

James Campbell..... 1853

## Secretary of the Navy

James C. Dobbin..... 1853

## Secretary of the Interior

Robert McClelland..... 1853

**BUCHANAN**

## Secretary of State

Lewis Cass..... 1857  
 Jeremiah S. Black..... 1860

## Secretary of the Treasury

Howell Cobb..... 1857  
 Philip F. Thomas..... 1860  
 John A. Dix..... 1861

## Secretary of War

John B. Floyd..... 1857  
 Joseph Holt..... 1861

## Attorney General

Jeremiah S. Black..... 1857  
 Edwin M. Stanton..... 1860

## Postmaster General

Aaron V. Brown..... 1857  
 Joseph Holt..... 1859  
 Horatio King..... 1861

## Secretary of the Navy

Isaac Toucey..... 1857

## Secretary of the Interior

Jacob Thompson..... 1857

**LINCOLN**

## Secretary of State

William H. Seward..... 1861

## Secretary of the Treasury

Salmon P. Chase..... 1861  
 William P. Fessenden..... 1864  
 Hugh McCulloch..... 1865

## Secretary of War

Simon Cameron..... 1861  
 Edwin M. Stanton..... 1862

## Attorney General

Edward Bates..... 1861  
 James Speed..... 1864

## Postmaster General

Montgomery Blair..... 1861  
 William Dennison..... 1864

## Secretary of the Navy

Gideon Welles..... 1861

## Secretary of the Interior

Caleb B. Smith..... 1861  
 John P. Usher..... 1863

**JOHNSON**

## Secretary of State

William H. Seward..... Contd

## Secretary of the Treasury

Hugh McCulloch..... Contd

## Secretary of War

Edwin M. Stanton..... Contd  
 John M. Schofield..... 1868

## Attorney General

James Speed..... Contd  
 Henry Stanbery..... 1866  
 William M. Evarts..... 1868

## Postmaster General

William Dennison..... Contd  
 Alexander W. Randall..... 1866

## Secretary of the Navy

Gideon Welles..... Contd

## Secretary of the Interior

John P. Usher..... Contd  
 James Harlan..... 1865  
 Orville H. Browning..... 1866

**GRANT**

## Secretary of State

Elihu B. Washburne..... 1869  
 Hamilton Fish..... 1869

## Secretary of the Treasury

George S. Boutwell..... 1869  
 William A. Richardson..... 1873  
 Benjamin H. Bristow..... 1874  
 Lot M. Morrill..... 1876

## Secretary of War

John A. Rawlins..... 1869  
 William T. Sherman..... 1869  
 William W. Belknap..... 1869  
 Alphonso Taft..... 1876  
 James D. Cameron..... 1876

## Attorney General

Ebenezer R. Hoar..... 1869  
 Amos T. Akerman..... 1870  
 George H. Williams..... 1871  
 Edwards Pierpont..... 1875  
 Alphonso Taft..... 1876

## Postmaster General

John A. J. Creswell..... 1869  
 James W. Marshall..... 1874  
 Marshall Jewell..... 1874  
 James N. Tyner..... 1876

## Secretary of the Navy

Adolph E. Borie..... 1869  
 George M. Robeson..... 1869

## Secretary of the Interior

Jacob D. Cox..... 1869  
 Columbus Delano..... 1870  
 Zachariah Chandler..... 1875

**HAYES**

## Secretary of State

William M. Evarts..... 1877

## Secretary of the Treasury

John Sherman..... 1877

## Secretary of War

George W. McCrary..... 1877  
 Alexander Ramsey..... 1879

## Attorney General

Charles Devens..... 1877

## Postmaster General

David M. Key..... 1877  
 Horace Maynard..... 1880

## Secretary of the Navy

Richard W. Thompson..... 1877  
 Nathan Goff, Jr..... 1881

## Secretary of the Interior

Carl Schurz..... 1877

**GARFIELD**

## Secretary of State

James G. Blaine..... 1881

## Secretary of the Treasury

William Windom..... 1881

## Secretary of War

Robert T. Lincoln..... 1881

## Attorney General

Wayne MacVeagh..... 1881

## Postmaster General

Thomas L. James..... 1881

## Secretary of the Navy

William H. Hunt..... 1881

## Secretary of the Interior

Samuel J. Kirkwood..... 1881

**ARTHUR**

## Secretary of State

James G. Blaine..... Contd  
F. T. Frelinghuysen..... 1881

## Secretary of the Treasury

William Windom..... Contd  
Charles J. Folger..... 1881  
Walter Q. Gresham..... 1884  
Hugh McCulloch..... 1884

## Secretary of War

Robert T. Lincoln..... Contd

## Attorney General

Wayne MacVeagh..... Contd  
Benjamin H. Brewster..... 1881

## Postmaster General

Thomas L. James..... Contd  
Timothy O. Howe..... 1881  
Walter Q. Gresham..... 1883  
Frank Hatton..... 1884

## Secretary of the Navy

William H. Hunt..... Contd  
William E. Chandler..... 1882

## Secretary of the Interior

Samuel J. Kirkwood..... Contd  
Henry M. Teller..... 1882

**CLEVELAND**

## Secretary of State

Thomas F. Bayard..... 1885

## Secretary of the Treasury

Daniel Manning..... 1885  
Charles S. Fairchild..... 1887

## Secretary of War

William C. Endicott..... 1885

## Attorney General

Augustus H. Garland... 1885

## Postmaster General

William F. Vilas..... 1885  
Don M. Dickinson..... 1888

## Secretary of the Navy

William C. Whitney.... 1885

## Secretary of the Interior

Lucius Q. C. Lamar..... 1885  
William F. Vilas..... 1888

## Secretary of Agriculture

Norman J. Colman..... 1889

**HARRISON**

## Secretary of State

James G. Blaine..... 1889  
John W. Foster..... 1892

## Secretary of the Treasury

William Windom..... 1889  
Charles Foster..... 1891

## Secretary of War

Redfield Proctor..... 1889  
Stephen B. Elkins..... 1891

## Attorney General

William H. A. Miller..... 1889

## Postmaster General

John Wanamaker..... 1889

## Secretary of the Navy

Benjamin F. Tracy..... 1889

## Secretary of the Interior

John W. Noble..... 1889

## Secretary of Agriculture

Jeremiah M. Rusk..... 1889

**CLEVELAND**

## Secretary of State

Walter Q. Gresham..... 1893  
Richard Olney..... 1895

## Secretary of the Treasury

John G. Carlisle..... 1893

## Secretary of War

Daniel S. Lamont..... 1893

## Attorney General

Richard Olney..... 1893  
Judson Harmon..... 1895

## Postmaster General

Wilson S. Bissell..... 1893  
William L. Wilson..... 1895

## Secretary of the Navy

Hilary A. Herbert..... 1893

## Secretary of the Interior

Hoke Smith..... 1893  
David R. Francis..... 1896

## Secretary of Agriculture

Julius Sterling Morton. 1893

**MCKINLEY**

## Secretary of State

John Sherman..... 1897  
William R. Day..... 1898  
John Hay..... 1898

## Secretary of the Treasury

Lyman J. Gage..... 1897

## Secretary of War

Russell A. Alger..... 1897  
Elihu Root..... 1895

## Attorney General

Joseph McKenna..... 1897  
John W. Griggs..... 1898  
Philander C. Knox..... 1901

## Postmaster General

James A. Gary..... 1897  
Charles E. Smith..... 1898

## Secretary of the Navy

John D. Long..... 1897

## Secretary of the Interior

Cornelius N. Bliss..... 1897  
Ethan A. Hitchcock..... 1898

## Secretary of Agriculture

James Wilson..... 1897

**T. ROOSEVELT**

## Secretary of State

John Hay..... Contd  
Elihu Root..... 1905  
Robert Bacon..... 1909

## Secretary of the Treasury

Lyman J. Gage..... Contd  
Leslie M. Shaw..... 1902  
George B. Cortelyou... 1907

## Secretary of War

Elihu Root..... Contd  
William H. Taft..... 1904  
Luke E. Wright..... 1908

## Attorney General

Philander C. Knox.... Contd  
William H. Moody..... 1904  
Charles J. Bonaparte... 1906

## Postmaster General

Charles E. Smith..... Contd  
Henry C. Payne..... 1902  
Robert J. Wynne..... 1904  
George B. Cortelyou... 1905  
George von L. Meyer... 1907

## Secretary of the Navy

John D. Long..... Contd  
William H. Moody..... 1902  
Paul Morton..... 1904  
Charles J. Bonaparte... 1905  
Victor H. Metcalf..... 1906  
Truman H. Newberry... 1908

## Secretary of the Interior

Ethan A. Hitchcock... Contd  
James R. Garfield..... 1907

## Secretary of Agriculture

James Wilson..... Contd

Secretary of Commerce  
and Labor

George B. Cortelyou... 1903  
Victor H. Metcalf..... 1904  
Oscar S. Straus..... 1906

**TAFT**

## Secretary of State

Philander C. Knox..... 1909

## Secretary of the Treasury

Franklin MacVeagh... 1909

## Secretary of War

Jacob M. Dickinson... 1909  
Henry L. Stimson..... 1911

## Attorney General

George W. Wickersham. 1909

## Postmaster General

Frank H. Hitchcock... 1909

## Secretary of the Navy

George von L. Meyer... 1909

## Secretary of the Interior

Richard A. Ballinger... 1909  
Walter L. Fisher..... 1911

## Secretary of Agriculture

James Wilson..... Contd

Secretary of Commerce  
and Labor

Charles Nagel..... 1909

**WILSON**

## Secretary of State

William J. Bryan..... 1913  
Robert Lansing..... 1915  
Bainbridge Colby..... 1920

## Secretary of the Treasury

William G. McAdoo... 1913  
Carter Glass..... 1918  
David F. Houston..... 1920

## Secretary of War

Lindley M. Garrison... 1913  
Newton D. Baker..... 1916

## Attorney General

James C. McReynolds... 1913  
Thomas W. Gregory... 1914  
A. Mitchell Palmer... 1919

## Postmaster General

Albert S. Burleson..... 1913

## Secretary of the Navy

Josephus Daniels..... 1913

## Secretary of the Interior

Franklin K. Lane..... 1913  
John B. Payne..... 1920

## Secretary of Agriculture

David F. Houston..... 1913  
Edwin T. Meredith... 1920

## Secretary of Commerce

William C. Redfield... 1913  
Joshua W. Alexander... 1919

## Secretary of Labor

William B. Wilson..... 1913

**HARDING**

## Secretary of State

Charles E. Hughes..... 1921

## Secretary of the Treasury

Andrew W. Mellon..... 1921

## Secretary of War

John W. Weeks..... 1921

## Attorney General

Harry M. Daugherty... 1921

Postmaster General

Will H. Hays..... 1921  
Hubert Work..... 1922  
Harry S. New..... 1923

## Secretary of the Navy

Edwin Denby..... 1921

## Secretary of the Interior

Albert B. Fall..... 1921  
Hubert Work..... 1923

## Secretary of Agriculture

Henry C. Wallace..... 1921

## Secretary of Commerce

Herbert Hoover..... 1921

## Secretary of Labor

James J. Davis..... 1921



**COOLIDGE**

Secretary of State  
Charles E. Hughes.... Contd  
Frank B. Kellogg..... 1925

Secretary of the Treasury  
Andrew W. Mellon.... Contd

Secretary of War  
John W. Weeks..... Contd  
Dwight F. Davis..... 1925

Attorney General  
Harry M. Daugherty... Contd  
Harlan F. Stone..... 1924  
John G. Sargent..... 1925

Postmaster General  
Harry S. New..... Contd

Secretary of the Navy  
Edwin Denby..... Contd  
Curtis D. Wilbur..... 1924

Secretary of the Interior  
Hubert Work..... Contd  
Roy O. West..... 1928

Secretary of Agriculture  
Henry C. Wallace..... Contd  
Howard M. Gore..... 1924  
William M. Jardine..... 1925

Secretary of Commerce  
Herbert Hoover..... Contd  
William F. Whiting..... 1928

Secretary of Labor  
James J. Davis..... Contd

**HOOVER**

Secretary of State  
Frank B. Kellogg..... Contd  
Henry L. Stimson..... 1929

Secretary of the Treasury  
Andrew W. Mellon.... Contd  
Ogden L. Mills..... 1932

Secretary of War  
James W. Good..... 1929  
Patrick J. Hurley..... 1929

<sup>1</sup> The Postmaster General did not become a Cabinet member until 1829. Earlier Postmasters General were: Samuel Osgood (1789), Timothy Pickering (1791), Joseph Habersham (1795), Gideon Granger (1801), Return J. Meigs, Jr. (1814) and John McLean (1823). \* On July 26, 1947, the Departments of War and of the Navy were incorporated into the Department of Defense.

Attorney General  
William D. Mitchell.... 1929

Postmaster General  
Walter F. Brown..... 1929

Secretary of the Navy  
Charles F. Adams..... 1929

Secretary of the Interior  
Ray Lyman Wilbur..... 1929

Secretary of Agriculture  
Arthur M. Hyde..... 1929

Secretary of Commerce  
Robert P. Lamont..... 1929  
Roy D. Chapin..... 1932

Secretary of Labor  
James J. Davis..... Contd  
William N. Doak..... 1930

**F. ROOSEVELT**

Secretary of State  
Cordell Hull..... 1933  
E. R. Stettinius, Jr.... 1944

Secretary of the Treasury  
William H. Woodin..... 1933  
Henry Morgenthau, Jr.. 1934

Secretary of War  
George H. Dern..... 1933  
Harry H. Woodring.... 1936  
Henry L. Stimson..... 1940

Attorney General  
Homer S. Cummings.... 1933  
Frank Murphy..... 1939  
Robert H. Jackson..... 1940  
Francis Biddle..... 1941

Postmaster General  
James A. Farley..... 1933  
Frank C. Walker..... 1940

Secretary of the Navy  
Claude A. Swanson..... 1933  
Charles Edison..... 1940  
Frank Knox..... 1940  
James Forrestal..... 1944

Secretary of the Interior  
Harold L. Ickes..... 1933

Secretary of Agriculture  
Henry A. Wallace..... 1933  
Claude R. Wickard..... 1940

Secretary of Commerce  
Daniel C. Roper..... 1933  
Harry L. Hopkins..... 1938  
Jesse H. Jones..... 1940  
Henry A. Wallace..... 1945

Secretary of Labor  
Frances Perkins..... 1933

**TRUMAN**

Secretary of State  
E. R. Stettinius, Jr.... Contd  
James F. Byrnes..... 1945  
George C. Marshall.... 1947  
Dean Acheson..... 1949

Secretary of the Treasury  
Henry Morgenthau, Jr. Contd  
Fred M. Vinson..... 1945  
John W. Snyder..... 1946

Secretary of Defense  
James Forrestal..... 1947  
Louis A. Johnson..... 1949  
George C. Marshall.... 1950  
Robert A. Lovett..... 1951

Attorney General  
Francis Biddle..... Contd  
Tom C. Clark..... 1945  
J. Howard McGrath.... 1949  
James P. McGranery... 1952

Postmaster General  
Frank C. Walker..... Contd  
Robert E. Hannegan.... 1945  
Jesse M. Donaldson.... 1947

Secretary of the Interior  
Harold L. Ickes..... Contd  
Julius C. Krug..... 1946  
Oscar L. Chapman..... 1949

Secretary of Agriculture  
Claude R. Wickard..... Contd  
Clinton P. Anderson... 1945  
Charles F. Brannan.... 1948

Secretary of Commerce  
Henry A. Wallace..... Contd  
W. Averell Harriman... 1946  
Charles Sawyer..... 1948

Secretary of Labor  
Frances Perkins..... Contd  
Lewis B. Schwellenbach 1945  
Maurice J. Tobin..... 1948

Secretary of War<sup>1</sup>  
Henry L. Stimson..... Contd  
Robert P. Patterson... 1945  
Kenneth C. Royall.... 1947

Secretary of the Navy<sup>1</sup>  
James Forrestal..... Contd

**EISENHOWER**

Secretary of State  
John Foster Dulles.... 1953

Secretary of the Treasury  
George M. Humphrey... 1953

Secretary of Defense  
Charles E. Wilson..... 1953

Attorney General  
Herbert Brownell, Jr.. 1953

Postmaster General  
Arthur Summerfield... 1953

Secretary of the Interior  
Douglas McKay..... 1953

Secretary of Agriculture  
Ezra Taft Benson..... 1953

Secretary of Commerce  
Sinclair Weeks..... 1953

Secretary of Labor  
Martin P. Durkin..... 1953  
James P. Mitchell.... 1953

Secretary of Health,  
Education and Welfare  
Oveta Culp Hobby..... 1953

**The Confederate States of America, 1861-65**

President—Jefferson Davis; born, Christian (now Todd) Co., Ky., June 3, 1808; died, Dec. 6, 1889. Vice President—Alexander H. Stephens.

**CABINET\***

Secretary of State  
Robert Toombs..... 1861  
Robert M. T. Hunter.... 1861  
Judah P. Benjamin..... 1862

Secretary of Treasury  
Christopher Memminger... 1861  
George A. Trenholm..... 1864

Secretary of War  
Leroy P. Walker..... 1861  
Judah P. Benjamin..... 1861  
George W. Randolph.... 1862  
James A. Seddon..... 1862  
John C. Breckinridge.... 1865

Secretary of Navy  
Stephen R. Mallory..... 1861

Postmaster General  
Henry T. Ellett..... 1861  
John H. Reagan..... 1861

Attorney General  
Judah P. Benjamin..... 1861  
Thomas Bragg..... 1861  
Thomas N. Watts..... 1862  
George Davis..... 1864

\* Dates are those of appointment.

## Justices of the United States Supreme Court

Name	State	Term	Years	Born	Died	Name	State	Term	Years	Born	Died
*John Jay.....	N. Y.	1789-1795	6	1745	1829	Stanley Matthews.....	Ohio	1881-1889	8	1824	1889
John Rutledge.....	S. C.	1789-1791	2	1739	1800	Horace Gray.....	Mass.	1881-1902	21	1828	1902
William Cushing.....	Mass.	1789-1810	21	1732	1810	Samuel Blatchford.....	N. Y.	1882-1893	11	1820	1893
James Wilson.....	Pa.	1789-1798	9	1742	1798	Lucius Q. Lamar.....	Miss.	1888-1893	5	1825	1893
John Blair.....	Va.	1789-1796	7	1732	1800	*Melville W. Fuller.....	Ill.	1888-1910	22	1833	1910
James Iredell.....	N. C.	1790-1799	9	1751	1799	David J. Brewer.....	Kans.	1889-1910	21	1837	1910
Thomas Johnson.....	Md.	1792-1793	1 1/2	1732	1819	Henry B. Brown.....	Mich.	1890-1906	16	1836	1913
William Paterson.....	N. J.	1793-1806	13	1745	1806	George Shiras, Jr.....	Pa.	1892-1903	11	1832	1924
*John Rutledge.....	S. C.	1795-1795	0	1739	1800	Howell E. Jackson.....	Tenn.	1893-1895	2	1832	1895
Samuel Chase.....	Md.	1796-1811	15	1741	1811	Edward D. White.....	La.	1894-1910	16	1845	1921
*Oliver Ellsworth.....	Conn.	1796-1800	4	1745	1807	Rufus W. Peckham.....	N. Y.	1895-1909	14	1838	1909
Bushrod Washington.....	Va.	1798-1829	31	1762	1829	Joseph McKenna.....	Calif.	1898-1925	27	1843	1926
Alfred Moore.....	N. C.	1800-1804	4	1755	1810	Oliver W. Holmes.....	Mass.	1902-1932	30	1841	1935
*John Marshall.....	Va.	1801-1835	34	1755	1835	William R. Day.....	Ohio	1903-1922	19	1849	1923
William Johnson.....	S. C.	1804-1834	30	1771	1834	William H. Moody.....	Mass.	1906-1910	4	1853	1917
Brock Livingston.....	N. Y.	1806-1823	17	1757	1823	Horace H. Lurton.....	Tenn.	1909-1914	5	1844	1914
Thomas Todd.....	Ky.	1807-1826	19	1765	1826	*Edward D. White.....	La.	1910-1921	11	1845	1921
Joseph Story.....	Mass.	1811-1845	34	1779	1845	Charles E. Hughes.....	N. Y.	1910-1916	6	1862	1948
Gabriel Duval.....	Md.	1811-1835	23	1752	1844	Willis Van Devanter.....	Wyo.	1910-1937	26	1859	1941
Smith Thompson.....	N. Y.	1823-1843	20	1768	1843	Joseph R. Lamar.....	Ga.	1910-1916	6	1857	1916
Robert Trimble.....	Ky.	1826-1828	2	1777	1828	Mahlon Pitney.....	N. J.	1912-1923	11	1858	1924
John McLean.....	Ohio	1829-1861	32	1785	1861	Jas. C. McReynolds.....	Tenn.	1914-1941	26	1862	1946
Henry Baldwin.....	Pa.	1830-1844	14	1780	1844	Louis D. Brandeis.....	Mass.	1916-1939	23	1856	1941
James M. Wayne.....	Ga.	1835-1867	32	1790	1867	John H. Clarke.....	Ohio	1916-1922	6	1857	1945
*Roger B. Taney.....	Md.	1836-1864	28	1777	1864	*William H. Taft.....	Conn.	1921-1930	9	1857	1930
Philip P. Barbour.....	Va.	1836-1841	5	1783	1841	George Sutherland.....	Utah	1922-1938	16	1862	1942
John Catron.....	Tenn.	1837-1865	28	1786	1865	Pierce Butler.....	Minn.	1922-1939	17	1866	1939
John McKinley.....	Ala.	1837-1852	15	1780	1852	Edward T. Sanford.....	Tenn.	1923-1930	7	1865	1930
Peter V. Daniel.....	Va.	1841-1860	19	1784	1860	Harlan F. Stone.....	N. Y.	1925-1941	16	1872	1946
Samuel Nelson.....	N. Y.	1845-1872	27	1792	1873	*Charles E. Hughes.....	N. Y.	1930-1941	11	1862	1948
Levi Woodbury.....	N. H.	1845-1851	6	1789	1851	Owen J. Roberts.....	Pa.	1930-1945	15	1875	
Robert C. Grier.....	Pa.	1846-1870	23	1794	1870	Benjamin N. Cardozo.....	N. Y.	1932-1938	6	1870	1938
Benjamin R. Curtis.....	Mass.	1851-1857	6	1809	1874	Hugo L. Black.....	Ala.	1937-1971		1886	
John A. Campbell.....	Ala.	1853-1861	8	1811	1889	Stanley F. Reed.....	Ky.	1938-1962		1884	
Nathan Clifford.....	Maine	1858-1881	23	1803	1881	Felix Frankfurter.....	Mass.	1939-1963		1882	
Noah H. Swayne.....	Ohio	1862-1881	18	1804	1884	William O. Douglas.....	Conn.	1939-1963		1898	
Samuel F. Miller.....	Iowa	1862-1890	28	1816	1890	Frank Murphy.....	Mich.	1940-1949	9	1890	1949
David Davis.....	Ill.	1862-1877	15	1815	1886	*Harlan F. Stone.....	N. Y.	1941-1946	5	1872	1946
Stephen J. Field.....	Calif.	1863-1897	34	1816	1899	James F. Byrnes.....	S. C.	1941-1942	1	1879	
*Salmon P. Chase.....	Ohio	1864-1873	9	1808	1873	Robert H. Jackson.....	N. Y.	1941-1954		1892	
William Strong.....	Pa.	1870-1880	10	1808	1895	Wiley B. Rutledge.....	Iowa	1943-1949	6	1894	1949
Joseph P. Bradley.....	N. J.	1870-1892	22	1813	1892	Harold H. Burton.....	Ohio	1945-1955		1888	
Ward Hunt.....	N. Y.	1872-1882	10	1810	1886	*Fred M. Vinson.....	Ky.	1946-1953	7	1890	1953
*Morrison R. Waite.....	Ohio	1874-1888	14	1816	1888	Tom C. Clark.....	Tex.	1949-1968		1899	
John M. Harlan.....	Ky.	1877-1911	34	1833	1911	Sherman Minton.....	Ind.	1949-1961		1890	
William B. Woods.....	Ga.	1880-1887	7	1824	1887	*Earl Warren.....	Calif.	1953-1968		1891	

\* Chief Justices. † Appointed and served one term, but not confirmed by Senate.

## Federal Impeachments

*Source: Congressional Directory.*

The Senate has sat as a court of impeachment in the following cases:

**WILLIAM BLOUNT**, Senator from Tennessee; charges dismissed for want of jurisdiction, January 14, 1799.

**JOHN PICKERING**, Judge of the U. S. District Court for New Hampshire; removed from office March 12, 1804.

**SAMUEL CHASE**, Associate Justice of the Supreme Court; acquitted March 1, 1805.

**JAMES H. PECK**, Judge of the U. S. District Court for Missouri; acquitted Jan. 31, 1831.

**WEST H. HUMPHREYS**, Judge of the United States District Court for the middle, eastern, and western districts of Tennessee; removed from office June 26, 1862.

**ANDREW JOHNSON**, President of the United States; acquitted May 26, 1868.

**WILLIAM W. BELKNAP**, Secretary of War; acquitted Aug. 1, 1876.

**CHARLES SWAYNE**, Judge of the United States District Court for the northern district of Florida; acquitted Feb. 27, 1905.

**ROBERT W. ARCHBALD**, Associate Judge, United States Commerce Court; removed from office January 13, 1913.

**GEORGE W. ENGLISH**, Judge of the U. S. District Court for the eastern district of Illinois; resigned office November 4, 1926; impeachment proceedings dismissed.

**HAROLD LOUDERBACK**, Judge of the U. S. District Court for the northern district of California; acquitted May 24, 1933.

**HALSTED L. RITTER**, Judge of the U. S. District Court for the southern district of Florida; removed April 17, 1936.

## SPEAKERS OF THE HOUSE OF REPRESENTATIVES

Source: Congressional Directory.

Name and state	Congress	Dates served	Name and state	Congress	Dates served
F. A. C. Muhlenburg (Pa.)	1	1789-1791	Wm. Pennington (N. J.)	36	1859-1861
Jonathan Trumbull (Conn.)	2	1791-1793	Galusha A. Grow (Pa.)	37	1861-1863
F. A. C. Muhlenburg (Pa.)	3	1793-1795	Schuyler Colfax (Ind.)	38-40	1863-1869
Jonathan Dayton (N. J.) <sup>1</sup>	4-5	1795-1799	Theodore M. Pomeroy (N. Y.) <sup>5</sup>	40	1869-1869
Theodore Sedgwick (Mass.)	6	1799-1801	James G. Blaine (Maine)	41-43	1869-1875
Nathaniel Macon (N. C.)	7-9	1801-1807	Michael C. Kerr (Ind.) <sup>6</sup>	44	1875-1876
Joseph B. Varnum (Mass.)	10-11	1807-1811	Samuel J. Randall (Pa.)	44-46	1876-1881
Henry Clay (Ky.) <sup>2</sup>	12-13	1811-1814	J. Warren Kelfer (Ohio)	47	1881-1883
Langdon Cheves (S. C.)	13	1814-1815	John G. Carlisle (Ky.)	48-50	1883-1889
Henry Clay (Ky.) <sup>3</sup>	14-16	1815-1820	Thomas B. Reed (Maine)	51	1889-1891
John W. Taylor (N. Y.)	16	1820-1821	Charles F. Crisp (Ga.)	52-53	1891-1895
Philip P. Barbour (Va.)	17	1821-1823	Thomas B. Reed (Maine)	54-55	1895-1899
Henry Clay (Ky.)	18	1823-1825	David B. Henderson (Iowa)	56-57	1899-1903
John W. Taylor (N. Y.)	19	1825-1827	Joseph G. Cannon (Ill.)	58-61	1903-1911
Andrew Stevenson (Va.) <sup>4</sup>	20-23	1827-1834	Champ Clark (Mo.)	62-65	1911-1919
John Bell (Tenn.)	23	1834-1835	Frederick H. Gillett (Mass.)	66-68	1919-1925
James K. Polk (Tenn.)	24-25	1835-1839	Nicholas Longworth (Ohio)	69-71	1925-1931
Robert M. T. Hunter (Va.)	26	1839-1841	John N. Garner (Tex.)	72	1931-1933
John White (Ky.)	27	1841-1843	Henry T. Rainey (Ill.)	73	1933-1935
John W. Jones (Va.)	28	1843-1845	Joseph W. Byrns (Tenn.) <sup>7</sup>	74	1935-1936
John W. Davis (Ind.)	29	1845-1847	William B. Bankhead (Ala.) <sup>8</sup>	74-76	1936-1940
Robert C. Winthrop (Mass.)	30	1847-1849	Sam Rayburn (Tex.)	76-79	1940-1947
Howell Cobb (Ga.)	31	1849-1851	Joseph W. Martin, Jr. (Mass.)	80	1947-1949
Linn Boyd (Ky.)	32-33	1851-1855	Sam Rayburn (Tex.)	81-82	1949-1953
Nathaniel P. Banks (Mass.)	34	1855-1857	Joseph W. Martin, Jr. (Mass.)	83	1953-
James L. Orr (S. C.)	35	1857-1859			

<sup>1</sup> George Dent (Md.) was elected Speaker pro tempore for Apr. 20 and May 28, 1793. <sup>2</sup> Resigned during 2d session of 13th Congress. <sup>3</sup> Resigned between 1st and 2d sessions of 16th Congress. <sup>4</sup> Resigned during 1st session of 23d Congress. <sup>5</sup> Elected Speaker and served the day of adjournment. <sup>6</sup> Died between 1st and 2d sessions of 44th Congress. During 1st session, there were two Speakers pro tempore: Samuel S. Cox (N. Y.), appointed for Feb. 17, May 12 and June 19, 1876, and Milton Saylor (Ohio), appointed for June 4, 1876. <sup>7</sup> Died during 2d session of 74th Congress. <sup>8</sup> Died during 3d session of 76th Congress.

## The White House

Source: National Park Service.

The White House, the official residence of the President, is located on Pennsylvania Avenue in Washington, D. C. The site covering about 18 acres was selected by President Washington and Pierre Charles L'Enfant, and the architect was James Hoban. The design of the mansion is said to have been suggested by the Duke of Leinster's Palace in Ireland. The cornerstone was laid Oct. 13, 1792, and the first residents were President and Mrs. John Adams in Nov., 1800. The building was fired by the British in 1814, and the sandstone exterior was painted white during the course of reconstruction.

The rooms for public functions are on the first floor; on the second are the President's apartments. The most celebrated public room is the East Room, where formal receptions take place. Other public rooms are the Red Room, the Green Room,

and the Blue Room. The State Dining Room is used for formal dinners.

The Executive Office, a three-story structure at the west end of the West Terrace, was added to the original building in 1902 to accommodate the President's office staff, and several additions have since been made. In 1942, a three-story building was erected at the end of the East Terrace, and now serves as the White House main entrance. In 1948, a second-story balcony was added to the White House inside the Ionic pillars of the south portico.

From Nov. 1948 to Mar. 1952, the White House was closed for social engagements and sightseers because of the deterioration of the building and the fear that it might collapse at any time. The walls were retained and strengthened, and the interior was rebuilt. There are now 132 rooms instead of the former 62.



## Diplomatic Personnel To and From the U. S.

(As of Sept. 1, 1954.) Source: U. S. Department of State.

Country	U. S. Representative to	Rank	Representative from	Rank
Afghanistan .....	Angus Ward	Amb.	Mohammad Kabir Ludin	Amb.
Argentina .....	Albert F. Nufer	Amb.	Dr. Hipolita J. Paz	Amb.
Australia .....	Amos J. Peaslee	Amb.	Sir Percy Spender	Amb.
Austria .....	Llewellyn E. Thompson, Jr.	(1)	Dr. Karl Gruber	Amb.
Belgium .....	Frederick M. Alger, Jr.	Amb.	Baron Silvercruys	Amb.
Bolivia .....	Edward J. Sparks	Amb.	Don Victor Andrade	Amb.
Brazil .....	James S. Kemper	Amb.	João Carlos Muniz	Amb.
Bulgaria <sup>2</sup> .....				
Burma .....	William J. Sebald	Amb.	James Barrington	Amb.
Cambodia .....	Robert McClintock	Amb.	Nong Kimny	Amb.
Canada .....	Douglas R. Stuart	Amb.	A. D. P. Heeney	Amb.
Ceylon .....	Philip K. Crowe	Amb.	R. S. S. Gunewardene	Amb.
Chile .....	Willard L. Beaulac	Amb.	Anibal Jara	Amb.
China <sup>4</sup> .....	Karl L. Rankin	Amb.	Dr. V. K. Wellington Koo	Amb.
Colombia .....	Rudolf E. Schoenfeld	Amb.	Dr. Don Eduardo Zuleta-Angel	Amb.
Costa Rica .....	Robert C. Hill	Amb.	Dr. Don Antonio A. Facio	Amb.
Cuba .....	Arthur Gardner	Amb.	Dr. Aurelio F. Concheso	Amb.
Czechoslovakia .....	U. Alexis Johnson	Amb.	Dr. Karel Petrželka	Amb.
Denmark .....	Robert D. Coe	Amb.	Henrik de Kauffmann	Amb.
Dominican Republic .....	William T. Phetffer	Amb.	Don Manuel A. de Moya	Amb.
Ecuador .....	Sheldon T. Mills	Amb.	Dr. José R. Chiriboga V	Amb.
Egypt .....	Jefferson A. Caffery	Amb.	Dr. Ahmed Husseln	Amb.
El Salvador .....	Michael J. McDermott	Amb.	Dr. Don Héctor David Castro	Amb.
Estonia .....	Legation closed	....	Johannes Kalv <sup>5</sup>	CG
Ethiopia .....	Joseph Simonson	Amb.	Yilma Deressa	Amb.
Finland .....	Jack K. McFall	Amb.	Johan A. Mykopp	Min.
France .....	C. Douglas Dillon	Amb.	Henri Bonnet	Amb.
Germany .....	James B. Conant	(6)	Dr. Heinz L. Krekeler	Amb.
Great Britain .....	Winthrop W. Aldrich	Amb.	Sir Roger Makins	Amb.
Greece .....	Cavendish W. Cannon	Amb.	Athanase G. Politis	Amb.
Guatemala .....	John E. Peurifoy	Amb.	José Luis Cruz Salazar	Amb.
Haiti .....	Roy Tasco Davis	Amb.	Jacques Léger	Amb.
Honduras .....	Whiting Willauer	Amb.	Dr. Rafael Hellodoro Valle	Amb.
Hungary .....	Christian M. Ravndal	Amb.	Károly Szarka	Min.
Iceland .....	John J. Nuccio	Min.	Thor Thors	Min.
India .....	George V. Allen <sup>7</sup>	Amb.	Gaganvihari Lallubhai Mehta	Amb.
Indonesia .....	Hugh S. Cumming, Jr.	Amb.	Moekarto Notowidigdo	Amb.
Iran .....	Loy W. Henderson	Amb.	Nasrollah Entezam	Amb.
Iraq .....	Waldemar J. Gallman	Amb.	Dr. Moussa Al-Shabandar	Amb.
Ireland .....	William H. Taft, 3rd	Amb.	John Joseph Hearne	Amb.
Israel .....	Edward B. Lawson	Amb.	Abba Eban	Amb.
Italy .....	Clare Boothe Luce	Amb.	Alberto Tarchiani	Amb.
Japan .....	John M. Allison	Amb.	Sadao Iguchi	Amb.
Jordan .....	Lester D. Mallory	Amb.	Abdul Monem Rifa'i	Amb.
Korea .....	Ellis O. Briggs	Amb.	Dr. You Chan Yang	Amb.
Laos .....	Charles W. Yost	Amb.	Ourot R. Souvannavong	Min.
Latvia .....	Legation closed	....	Dr. Arnolds Spekke	Cd'A
Lebanon .....	Raymond A. Hare	Amb.	Dr. Charles Malik	Amb.
Liberia .....	Jesse D. Locker	Amb.	Clarence Lorenzo Simpson	Amb.
Libya .....	Henry S. Villard	Min.	Dr. Monsour Fathi El-Kekhia	Amb.
Lithuania .....	Legation closed	....	Povilas Zadeikis	Min.
Luxemburg .....	Wiley Thomas Buchanan, Jr.	Min.	Hugues Le Gallais	Min.
Mexico .....	Francis White	Amb.	Don Manuel Tello	Amb.
Morocco .....	Joseph C. Satterthwaite	Min.		....
Nepal .....	George V. Allen <sup>7</sup>	Amb.	Gen. Shanker Shamsher Jang Bahadur Rana	Amb.
Netherlands .....	H. Freeman Matthews	Amb.	Dr. J. H. van Roijen	Amb.
New Zealand .....	Robert M. Scotten	Amb.	Leslie Knox Munro	Amb.
Nicaragua .....	Thomas E. Whelan	Amb.	Dr. Don Guillermo Sevilla-Sacasa	Amb.

Country	U. S. Representative to	Rank	Representative from	Rank
Norway .....	L. Corrin Strong	Amb.	Wilhelm Munthe de Morgenstierne	Amb.
Pakistan .....	Horace A. Hildreth	Amb.	Syed Amjad Ali	Amb.
Panama .....	Selden A. Chapin	Amb.	Don Roberto M. Heutematte	Amb.
Paraguay .....	Arthur A. Ageton	Amb.	Dr. Don Guillermo Enciso-Velloso	Amb.
Peru .....	Harold H. Tittmann	Amb.	Don Fernando Berckemeyer	Amb.
Philippines .....	Raymond Ames Spruance	Amb.	Ralph T. Leuterio	Min.
Poland .....	Joseph A. Flack	Amb.	Jozef Winiewicz	Amb.
Portugal .....	(Vacancy)	Amb.	Luis Esteves Fernandes	Amb.
Rumania .....	Harold Shantz	Min.	Marin Florea Ionescu	Min.
Saudi Arabia .....	George Wadsworth <sup>3</sup>	....	Sheikh Asad Al-Faqih	Amb.
Spain .....	James Clement Dunn	Amb.	Don Eduardo Propper de Callejon	Amb.
Sweden .....	John M. Cabot	Amb.	Erik Boheman	Amb.
Switzerland .....	Frances E. Willis	Amb.	Charles Bruggmann	Min.
Syria .....	James S. Moose, Jr.	Amb.	Dr. Farid Zeneddine	Amb.
Thailand .....	William J. Donovan	Amb.	Pote Sarasin	Amb.
Turkey .....	Avra M. Warren	Amb.	Feridun O. Erkin	Amb.
Un. of So. Africa ..	(Vacancy)	Amb.	Dr. John E. Holloway	Amb.
U.S.S.R. ....	Charles E. Bohlen	Amb.	Georgi N. Zaroubin	Amb.
Uruguay .....	Dempster McIntosh	Amb.	Dr. José A. Mora	Amb.
Venezuela .....	Fletcher A. Warren	Amb.	Dr. César Gonzáles	Amb.
Viêt-Nam .....	Donald R. Heath	Amb.	Tran Van Chuong	Amb.
Yemen .....	George Wadsworth <sup>3</sup>	Min.	Sayed Abdurrahman Ibn Abdussamed Abu-Taled	Cd'A
Yugoslavia .....	James W. Riddleberger	Amb.	Leo Mates	Amb.

<sup>1</sup> U. S. High Commissioner and Ambassador. <sup>2</sup> U. S. broke off diplomatic relations with Bulgaria on Feb. 20, 1950. <sup>3</sup> Accredited to Saudi Arabia and Yemen; resident Jidda. <sup>4</sup> Formosa (Taiwan). <sup>5</sup> Legation in New York. <sup>6</sup> U. S. High Commissioner; also holds personal rank of Ambassador. <sup>7</sup> Accredited to India and Nepal; resident in New Delhi, India.

(Amb.—Ambassador; Min.—Minister; CG—Consul General; Cd'A—Charge d'Affaires)

## Assassinations and Attempts in U. S. Since 1865

**CERMAK, Anton J. (Mayor of Chicago):**  
Shot Feb. 15, 1933, in Miami by Giuseppe Zangara, who attempted to assassinate

Franklin D. Roosevelt; Cermak died Mar. 6.

**GARFIELD, James A. (President of U. S.):**  
Shot July 2, 1881, in Washington, D. C., by Charles J. Guiteau; died Sept. 19.

**LINCOLN, Abraham (President of U. S.):**  
Shot Apr. 14, 1865, in Washington, D. C., by John Wilkes Booth; died Apr. 15.

**LONG, Huey P. (U. S. Senator from Louisiana):** Shot Sept. 8, 1935, in Baton Rouge by Dr. Carl A. Weiss; died Sept. 10.

**McKINLEY, William (President of U. S.):**  
Shot Sept. 6, 1901, in Buffalo by Leon Czolgosz; died Oct. 29.

**ROOSEVELT, Franklin D. (President-elect of U. S.):** Escaped assassination unhurt Feb. 15, 1933, in Miami. *See* Cermak.

**ROOSEVELT, Theodore (ex-President of U. S.):** Escaped assassination (though shot) Oct. 14, 1912, in Milwaukee while campaigning for President.

**SEWARD, William H. (Secretary of State):**  
Escaped assassination (though injured) Apr. 14, 1865, in Washington, D. C., by Lewis Powell (or Paine), accomplice of John Wilkes Booth.

**TRUMAN, Harry S. (President of U. S.):**  
Escaped assassination unhurt Nov. 1, 1950, in Washington, D. C., as 2 Puerto Rican nationalists attempted to shoot their way into Blair House.

## The Liberty Bell

The Liberty Bell was cast in England in 1752 for the Pennsylvania Statehouse (now Independence Hall). Damaged in transit, it was recast in Philadelphia in 1753 when it was inscribed with the words, "Proclaim liberty throughout the land unto all the inhabitants thereof" (Lev. 25:10). The bell was rung on July 8, 1776, for the first pub-

lic reading of the Declaration of Independence. Hidden in Allentown during the British occupation of Philadelphia, it was replaced in Independence Hall in 1781 where it remains today. The bell cracked on July 8, 1835, while tolling the death of Chief Justice John Marshall.

## The Cairo Conference

Important provisions of the Conference, which was held Nov. 22-26, 1943:

The several military missions have agreed upon future military operations against Japan. The Three Great Allies expressed their resolve to bring unrelenting pressure against their brutal enemies by sea, land, and air. This pressure is already rising.

The Three Great Allies are fighting this war to restrain and punish the aggression of Japan. They covet no gain for themselves and have no thought of territorial expansion. It is their purpose that Japan shall be stripped of all the islands in the Pacific which she has seized or occupied since the beginning of the first World War

in 1914, and that all the territories Japan has stolen from the Chinese, such as Manchuria, Formosa, and the Pescadores, shall be restored to the Republic of China. Japan will also be expelled from all other territories which she has taken by violence and greed. The aforesaid Three Great Powers, mindful of the enslavement of the people of Korea, are determined that in due course Korea shall become free and independent.

With these objectives in view the three Allies, in harmony with those of the United Nations at war with Japan, will continue to persevere in the serious and prolonged operations necessary to procure the unconditional surrender of Japan.

## The Teheran Conference

(Nov. 28-Dec. 1, 1943)

The President of the United States of America, the Premier of the Union of Soviet Socialist Republics, and the Prime Minister of the United Kingdom, have consulted with each other and with the Prime Minister of Iran, desire to declare the mutual agreement of their three Governments regarding relations with Iran.

The Governments of the United States of America, the Union of Soviet Socialist Republics and the United Kingdom recognize the assistance which Iran has given in the prosecution of the war against the common enemy, particularly by facilitating transportation of supplies from overseas to the Soviet Union. The three Governments realize that the war has caused special economic difficulties for Iran and they are agreed that they will continue to make available to the Government of Iran such economic assistance as may be possible, having regard to the heavy demands made upon them by their worldwide military operations and to the worldwide shortage of transport, raw materials and supplies for civilian consumption.

With respect to the post-war period, the Governments of the United States of America, the Union of Soviet Socialist Republics and the United Kingdom are in accord with the Government of Iran that any economic problem confronting Iran at the close of hostilities should receive full consideration along with those of the other members of the United Nations by conferences or international agencies held or created to deal with international economic matters.

The Governments of the United States of America, the Union of Soviet Socialist Republics and the United Kingdom are at one with the Government of Iran in their desire for the maintenance of the independence, sovereignty and territorial integrity of Iran. They count upon the participation of Iran together with all other peace-loving nations in the establishment of international peace, security and prosperity after the war in accordance with the principles of the Atlantic Charter, to which all four governments have continued to subscribe

## The Yalta Conference

Important provisions of the Conference, which was held Feb. 4-11, 1945:

### The Occupation and Control of Germany

We have a need on common policies and plans for enforcing the unconditional surrender terms which we shall impose together on Nazi Germany after German armed resistance has been finally crushed. These terms will not be made known until the final defeat of Germany has been accomplished. Under the agreed plan, the forces of the three powers will each occupy a separate zone of Germany. Coordinated administration and control has been provided for under the plan through a central Control Commission, consisting of

the supreme commanders of the three powers, with headquarters in Berlin. It has been agreed that France should be invited by the three powers, if she should so desire, to take over a zone of occupation, and to participate as a fourth member of the Control Commission. The limits of the French zone will be agreed upon by the four Governments concerned through their representatives on the European Advisory Commission.

It is our inflexible purpose to destroy German militarism and nazism and to ensure that Germany will never again be able to disturb the peace of the world. We are determined to disarm and disband all



German armed forces; break up for all time the German General Staff that has repeatedly contrived the resurgence of German militarism; remove or destroy all German military equipment; eliminate or control all German industry that could be used for military production; bring all war criminals to just and swift punishment and exact reparation in kind for the destruction wrought by the Germans; wipe out the Nazi Party, Nazi laws, organizations, and institutions, remove all Nazi and militarist influences from public office and from the cultural and economic life of the German people; and take in harmony such other measures in Germany as may be necessary to the future peace and safety of the world. It is not our purpose to destroy the people of Germany, but only when nazism and militarism have been extirpated will there be hope for a decent life for Germans, and a place for them in the comity of nations.

#### Terms Under Which Russia Entered the War Against Japan

The leaders of the Three Great Powers—the Soviet Union, the United States of America and Great Britain—have agreed that in two or three months after Germany has surrendered and the war in Europe has terminated the Soviet Union shall enter into the war against Japan on the side of the Allies on condition that:

1. The status quo in Outer Mongolia (The Mongolian People's Republic) shall be preserved;

2. The former rights of Russia violated by the treacherous attack of Japan in 1904 shall be restored, viz.:

- (a) the southern part of Sakhalin as well as all the islands adjacent to it shall be returned to the Soviet Union,

- (b) the commercial port of Dairen shall be internationalized, the preeminent interests of the Soviet Union in this port being safeguarded and the lease of Port Arthur as a naval base of the U.S.S.R. restored,

- (c) the Chinese-Eastern Railroad and the South-Manchurian Railroad which provides an outlet to Dairen shall be jointly operated by the establishment of a joint Soviet-Chinese Company, it being understood that the preeminent interests of the Soviet Union shall be safeguarded and that China shall retain full sovereignty in Manchuria;

3. The Kurile Islands shall be handed over to the Soviet Union.

It is understood, that the agreement concerning Outer Mongolia and the ports and railroads referred to above will require concurrence of Generalissimo Chiang Kai-shek. The President will take measures in order to obtain this concurrence on advice from Marshal Stalin.

The Heads of the Three Great Powers have agreed that these claims of the Soviet Union shall be unquestionably fulfilled after Japan has been defeated.

For its part the Soviet Union expresses its readiness to conclude with the National Government of China a pact of friendship and alliance between the U.S.S.R. and China in order to render assistance to China with its armed forces for the purpose of liberating China from the Japanese yoke.

## The Potsdam Declaration

**Text of the declaration issued at Potsdam, Germany, July 28, 1945, outlining the terms under which Japan would be allowed to surrender:**

1. We, the President of the United States, the President of the national government of the Republic of China and the Prime Minister of Great Britain, representing the hundreds of millions of our countrymen, have conferred and agreed that Japan shall be given the opportunity to end this war.

2. The prodigious land, sea, and air forces of the United States, the British Empire and China, many times reinforced by their armies and air fleets from the west, are poised to strike the final blow at Japan. This military power is sustained and inspired by the determination of all allied nations to prosecute the war against Japan until she ceases to resist.

3. The result of the futile and senseless German resistance to the might of the aroused free peoples of the world stands forth in awful clarity as an example to the people of Japan.

The might that now converges on Japan is immeasurably greater than that which, when applied to the resisting Nazis, necessarily laid waste to the land, the industry, and the method of life of the whole German people.

The full application of our military power, backed by our resolve, will mean the inevitable and complete destruction of the Japanese armed forces and just as inevitably the utter devastation of the Japanese homeland.

4. The time has come for Japan to decide whether she will continue to be controlled by these self-willed militaristic advisers whose unintelligent calculations have brought the empire of Japan to the threshold of annihilation, or whether she will follow the path of reason.

5. The following are our terms: we will not deviate from them; there are no alternatives; we shall brook no delay.

6. There must be eliminated for all time the authority and influence of those

who have deceived and misled the people of Japan into embarking on world conquest, for we insist that a new order of peace, security, and justice will be impossible until irresponsible militarism is driven from the world.

7. Until such a new order is established and until there is convincing proof that Japan's war-making power is destroyed, points in Japanese territory to be designated by the Allies shall be occupied to secure the achievement of the basic objectives. We are here setting forth.

8. The terms of the Cairo declaration shall be carried out and Japanese sovereignty shall be limited to the Islands of Honshu, Hokkaido, Kyushu, Shikoku and such minor islands as we determine.

9. Japanese military forces after being completely disarmed shall be permitted to return to their homes with the opportunity to lead peaceful and productive lives.

10. We do not intend that the Japanese shall be enslaved as a race or destroyed as a nation, but stern justice shall be meted out to all war criminals, including those who have visited cruelties upon our prisoners.

The Japanese government shall remove all obstacles to the revival and strength-

ening of democratic tendencies among the Japanese people. Freedom of speech and religion and of thought, as well as respect for the fundamental human rights, shall be established.

11. Japan shall be permitted to maintain such industries as will sustain her economy and permit the payment of just reparation in kind, but not those industries which will enable her to rearm for war.

To this end, access to, as distinguished from control of, raw materials shall be permitted. Eventual Japanese participation in world trade relations shall be permitted.

12. The occupying forces of the Allies shall be withdrawn from Japan as soon as these objectives have been accomplished and there has been established in accordance with the freely expressed will of the Japanese people a peacefully inclined and responsible government.

13. We call upon the government of Japan to proclaim now the unconditional surrender of all Japanese armed forces, and to provide proper and adequate assurances of their good faith in such action. The alternative for Japan is prompt and utter destruction.

## North Atlantic Treaty

Signed at Washington, D.C., April 4, 1949

The Parties to this Treaty reaffirm their faith in the purposes and principles of the Charter of the United Nations and their desire to live in peace with all peoples and all governments.

They are determined to safeguard the freedom, common heritage and civilization of their peoples, founded on the principles of democracy, individual liberty and the rule of law.

They seek to promote stability and well-being in the North Atlantic area.

They are resolved to unite their efforts for collective defense and for the preservation of peace and security.

They therefore agree to this North Atlantic Treaty:

### Article 1

The Parties undertake, as set forth in the Charter of the United Nations, to settle any international disputes in which they may be involved by peaceful means in such a manner that international peace and security, and justice, are not endangered, and to refrain in their international relations from the threat or use of force in any manner inconsistent with the purposes of the United Nations.

### Article 2

The Parties will contribute toward the further development of peaceful and friendly international relations by strength-

ening their free institutions, by bringing about a better understanding of the principles upon which these institutions are founded, and by promoting conditions of stability and well-being. They will seek to eliminate conflict in their international economic policies and will encourage economic collaboration between any or all of them.

### Article 3

In order more effectively to achieve the objectives of this Treaty, the Parties, separately and jointly, by means of continuous and effective self-help and mutual aid, will maintain and develop their individual and collective capacity to resist armed attack.

### Article 4

The Parties will consult together whenever, in the opinion of any of them, the territorial integrity, political independence or security of any of the Parties is threatened.

### Article 5

The Parties agree that an armed attack against one or more of them in Europe or North America shall be considered an attack against them all; and consequently they agree that, if such an armed attack occurs, each of them, in exercise of the right of individual or collective self-defense recognized by Article 51 of the Charter of the United Nations, will assist the Party or Parties so attacked by taking forthwith,



individually and in concert with the other Parties, such action as it deems necessary, including the use of armed force, to restore and maintain the security of the North Atlantic area.

Any such armed attack and all measures taken as a result thereof shall immediately be reported to the Security Council. Such measures shall be terminated when the Security Council has taken the measures necessary to restore and maintain international peace and security.

#### Article 6

For the purpose of Article 5 an armed attack on one or more of the Parties is deemed to include an armed attack on the territory of any of the Parties in Europe or North America, on the Algerian departments of France, on the occupation forces of any Party in Europe, on the islands under the jurisdiction of any Party in the North Atlantic area north of the Tropic of Cancer or on the vessels or aircraft in this area of any of the Parties.

#### Article 7

This Treaty does not affect, and shall not be interpreted as affecting, in any way the rights and obligations under the Charter of the Parties which are members of the United Nations, or the primary responsibility of the Security Council for the maintenance of international peace and security.

#### Article 8

Each Party declares that none of the international engagements now in force between it and any other of the Parties or any third state is in conflict with the provisions of this Treaty, and undertakes not to enter into any international engagement in conflict with this Treaty.

#### Article 9

The Parties hereby establish a council, on which each of them shall be represented, to consider matters concerning the implementation of this Treaty. The council shall be so organized as to be able to meet promptly at any time. The council shall set up such subsidiary bodies as may be necessary; in particular it shall establish immediately a defense committee which shall recommend measures for the implementation of Articles 3 and 5.

#### Article 10

The Parties may, by unanimous agreement, invite any other European state in a position to further the principles of this

Treaty and to contribute to the security of the North Atlantic area to accede to this Treaty. Any state so invited may become a party to the Treaty by depositing its instrument of accession with the Government of the United States of America. The Government of the United States of America will inform each of the Parties of the deposit of each such instrument of accession.

#### Article 11

This Treaty shall be ratified and its provisions carried out by the Parties in accordance with their respective constitutional processes. The instruments of ratification shall be deposited as soon as possible with the Government of the United States of America, which will notify all the other signatories of each deposit. The Treaty shall enter into force between the states which have ratified it as soon as the ratifications of the majority of the signatories, including the ratifications of Belgium, Canada, France, Luxemburg, the Netherlands, the United Kingdom and the United States, have been deposited and shall come into effect with respect to other states on the date of the deposit of their ratifications.

#### Article 12

After the Treaty has been in force for ten years, or at any time thereafter, the Parties shall, if any of them so requests, consult together for the purpose of reviewing the Treaty, having regard for the factors then affecting peace and security in the North Atlantic area, including the development of universal as well as regional arrangements under the Charter of the United Nations for the maintenance of international peace and security.

#### Article 13

After the Treaty has been in force for twenty years, any Party may cease to be a party one year after its notice of denunciation has been given to the Government of the United States of America, which will inform the Governments of the other Parties of the deposit of each notice of denunciation.

#### Article 14

This Treaty, of which the English and French texts are equally authentic, shall be deposited in the archives of the Government of the United States of America. Duly certified copies thereof will be transmitted by that Government to the Governments of the other signatories.

### Tripartite Security Treaty

(United States, Australia, New Zealand)

Major provisions of the Tripartite agreement signed on Sept. 1, 1951, at San Francisco:

1. The parties undertake to settle by peaceful means any international disputes in which they may be involved.

2. The parties will maintain and develop their individual and collective capacity to resist armed attack.

3. The parties will consult together whenever the territorial integrity, political



independence or security of any of the parties is threatened in the Pacific.

4. Each party recognizes that an armed attack in the Pacific area on either of the other parties would be dangerous to its own peace and safety.

5. The parties hereby establish a council, consisting of their foreign ministers or their deputies, to consider matters concerning the implementation of this treaty.

6. This treaty shall remain in force indefinitely.

A Defense Treaty similar in its provisions to the Tripartite Security Treaty was signed by the United States and the Philippines in Washington, D. C., Aug 30, 1951.

## United States-Japanese Treaty

Main provisions of the U. S.-Japanese Security Treaty signed at San Francisco on Sept. 8, 1951:

1. Japan grants and the U. S. accepts the right to dispose U. S. land, air and sea forces in and about Japan. Such forces may be utilized to contribute to the maintenance of international peace and security in the Far East and to the security of Japan against armed attack from without, including assistance given at the express request of the Japanese government to put down large scale riots and disturbances in Japan caused through instigation or intervention by an outside power or powers.

2. Japan will not grant without the prior consent of the U. S. any bases or any rights, powers or authority whatsoever relating to bases, or the right of garrison or maneuver or transit of ground, air or naval forces of any third power.

3. This treaty shall expire whenever in the opinion of the governments of the U. S. and of Japan, U. N. arrangements or alternate individual or collective dispositions satisfactorily provide for the maintenance of international peace and security in the Japan area.

## Japanese Peace Treaty

The Japanese Peace Treaty was signed at San Francisco on September 8, 1951, by 49 nations; the U.S.S.R., Poland and Czechoslovakia were present but refused to sign. Among the major provisions of the treaty are the following:

**Peace:** The state of war between Japan and the Allies is terminated.

**Sovereignty:** Japan's full sovereignty is recognized as is its right to apply for U. N. membership.

**Territory:** Japan recognizes the independence of Korea; renounces all rights, titles or claims to Formosa, the Pescadores, the Kuriles, Sakhalin, the Pacific Islands formerly under mandate to Japan, the Antarctic area, Spratly Island and the Paracels.

Japan agrees to U. N. trusteeship over the Ryukyu and Daito Islands, the Bonins, Rosario Island, the Volcano Islands, Parece Vela and Marcus Island. Disposition of Japanese property on these islands is to be negotiated by Japan and the administering authorities.

**Security:** Japan agrees to settle its international disputes peaceably, to refrain from the threat of or the use of force and to abide by the principles of the U. N.

All occupation forces are to be withdrawn as soon as possible but not later than 90 days after a majority of the sig-

natory countries have given notice of ratification of this treaty. Nothing in this provision shall, however, prevent the stationing or retention of foreign armed forces in Japanese territory by agreement with one or more of the Allies.

**Political-Economic Clauses:** Japan may enter into fisheries treaties; may negotiate most-favored-nation trade and maritime treaties with the Allies; renounces all special rights and interests in China.

Japan accepts the judgments of the International Military Tribunal and Allied War Crimes Courts.

**Claims and Property:** Japan recognizes its responsibility to pay reparations but the Allies recognize its limited economic capacity; therefore, Japan shall pay through goods to be manufactured in Japan from raw materials provided by the victimized nations and by services. The Allies may retain certain properties seized from Japan but require the latter to return their properties within 6 months. Japan recognizes Allied industrial, literary and artistic property rights. It agrees to indemnify prisoners of war who suffered unduly but renounces similar claims against the Allies.

**Settlement of Disputes:** Any disagreements arising out of the interpretation of this treaty and not otherwise settled shall be submitted to the International Court of Justice.

# THE RISE OF THE UNITED STATES

by ARTHUR M. SCHLESINGER, SR.

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## 1. Under the English Flag

The land now comprehended within the United States once belonged to Spain, France, England, Holland and Sweden. Spain, colonizing from Mexico in the sixteenth and seventeenth centuries, expanded over most of the Gulf Coast, Texas and the border zone westward through California. France, moving down from Canada in the eighteenth century, annexed the Mississippi Valley from the Appalachians to the Rockies. Meanwhile, in the seventeenth century, the English began peopling the Atlantic shore, and finding the Dutch already established in the present New York and the Swedes in Delaware, seized their possessions.

Notwithstanding this varied international background, United States history has been largely the product of influences emanating from the seaboard communities. Unlike the Spanish and French, the English regarded their colonies as genuine extensions of the homeland, and the settlers sowed English customs, institutions and speech so thoroughly that they eventually spread everywhere. True, the transplanted ways underwent modification, but this arose from necessities imposed by a wilderness existence and, as time went on, from a growing sense of self-sufficiency.

Organized settlement began in 1607 at Jamestown, where the first representative assembly was set up in 1619. The Pilgrims followed at Plymouth in 1620, spearheading a much larger migration of Puritans into New England. Later in the century the Quakers occupied a midway region owned by William Penn, making Philadelphia their headquarters and fanning out in every direction. By 1700 all the thirteen colonies existed but the southernmost, Georgia, which came into being in 1733. The settlers crossed the ocean to escape economic, religious and political oppression and to start anew in a land of greater opportunity.

In time, other strains reinforced the original English population: French Huguenots, Scotch Irish, Germans and minor groups, including the Dutch and Swedes already on hand. African slaves, first introduced at Jamestown in 1619, were welcomed in all the colonies, though the economic need for them was greater in the South, and the system took deeper root there than elsewhere. The people in the North engaged mainly in small farming, fishing and commerce, the Southerners largely in plantation production. Everywhere the colonists practiced self-government. When they clashed with the English-appointed governors, the colonists usually

won out by withholding appropriations.

As the population penetrated farther inland, the settlers encountered the French guarding Canada and the eastern fringes of the Mississippi Valley. In a succession of wars (1689-1763), paralleling greater struggles between the parent nations abroad, France was finally ejected from North America and Britain's dominion extended to the Mississippi. Spain fell heir to the country west of the river, though some years later Napoleon was temporarily to reclaim it for France.

## 2. Birth of the Nation

With the removal of the Gallic menace the colonists felt less dependent upon the mother country militarily, and England's change from her former policy of "salutary neglect" aroused active resentment. A series of revenue measures, starting with the Sugar Act of 1764, provoked meetings of protest, nonimportation pacts and mob demonstrations in America. Colonial home rule was at stake, also freedom of trade, and the provincials appealed to the principle: "No taxation without representation." Parliament's action in 1774 penalizing all Massachusetts for the deed of a few in dumping dutied tea into Boston Harbor led to the first armed clash at Concord and Lexington on April 19, 1775; but a year and more passed before the patriots resolved upon the hazardous step of independence. The famous Declaration of July 4, 1776, penned by Thomas Jefferson for the Second Continental Congress, justified revolution as the only means to guarantee the "unalienable Rights" of "Life, Liberty and the pursuit of Happiness." Under George Washington as commander in chief the fighting shifted from New England into the middle states and then into the south. General Gates's victory at Saratoga on October 17, 1777, brought England's ancient enemy, France, into the war; just four years later the British yielded to the Allies at Yorktown. The Peace Treaty in 1783 recognized the United States as stretching to the Mississippi.

The infant, though born and baptized, had yet to be weaned. The league of states, formed under the Articles of Confederation in 1781, proved too weak either to deal effectively with foreign countries, or to raise necessary funds, or to ensure unrestricted domestic trade. Within the states, however, Revolutionary idealism prompted action to forbid primogeniture and tax-supported religions, and the Northern commonwealths abolished slavery, a prohibition which Congress's Ordinance of 1787 extended to the territory north of the Ohio. Feebleness of government, combined



with social disturbances culminating in Shay's Rebellion in Massachusetts, made sober men tremble for the sanctity of property rights and seemed to cloud the nation's future. The Federal Convention, summoned in 1787, designed a new framework after much wrangling between rival interests and sections.

The Constitution established a government of three separate and co-ordinate departments—legislative, executive and judicial—each endowed with adequate power, and each to serve as a check and balance on the others. Within its own sphere the general government was supreme, and it exerted its will not through state officials, as under the Articles of Confederation, but immediately upon individuals. Direct popular representation was limited to the House of Representatives, the Senate being chosen by the legislatures (a system which lasted till 1913), the President designated by Electors (who in practice, however, quickly lost their deliberative function), and the Supreme Court appointed by the President and Senate for life. Opposed in many states because of its centralizing and undemocratic features, the Constitution eventually won adoption on the assurance that a bill of rights would be added to preclude federal interference with civil liberties such as freedom of speech, the press and religion. The first ten amendments, in 1791, fulfilled the promise.

Perhaps no convention would have ratified the Constitution if it had been realized that an indivisible Union would ensue. The framers, engaged in the practical task of curing the defects of the Confederation government, strewed phrases through the document that had contradictory implications. On the basis of the text it was possible for equally honest men to maintain that the states were more powerful than the nation, or that the nation overtopped the states. At one time or other nearly every legislature, given what it considered sufficient provocation, asserted the right of nullification or secession. Short of such extreme doctrines, controversy began almost immediately over the question of whether the Constitution should be construed broadly to enhance the national authority or narrowly to lessen it.

Under George Washington, President from 1789 to 1797, the new government became a going concern. Congress, guided by Secretary of the Treasury Alexander Hamilton, buttressed the public credit by arranging to pay at par the national debt and the war-incurred state debts and by creating a United States Bank modeled upon the Bank of England. These measures, especially the last, alarmed Jefferson, veteran liberal and Washington's Secretary of State. Fearing that the legislation would build up a dangerous moneyed class, he urged a strict interpretation of the Con-

stitution in opposition to Hamilton's loose-construction views. The French Revolution widened the breach, for the Jeffersonian Democrats applauded as an upsurge of liberty what the Federalists dreaded as an eruption of chaos. But both men, knowing America's defenseless state, backed Washington's decision to maintain neutrality in France's war with England. Returned to power under John Adams, the Federalists in 1798, however, declared naval hostilities against France and passed the Alien and Sedition Acts to muzzle opposition criticism. Though Adams, defying his party, prevented a full-scale war, he lost the election of 1800 to Jefferson. The Federalists never saw office again.

### 3. Democracy and Nationalism

The farming interest, which Jefferson deemed the bulwark of free government, had steadily increased since the Revolution. As settlers trekked inland, new states joined the original thirteen: Vermont, Kentucky and Tennessee in the 1790's, with Ohio and others shortly to follow. Western pioneer life begot an intense individualism, fostered political and economic democracy, stimulated nationalism. In the South, by contrast, Eli Whitney's invention of the cotton gin in 1793 opened the way for plantation agriculture and Negro slavery to expand westward beyond the Mississippi. The growth of manufacturing in the Northeast introduced a third element into the scene. The rivalries of these sectional forces wove the principal strands of American history until the Civil War. Toward the mid-century the situation was further confused by the spread of manhood suffrage and a sudden mass immigration from Ireland and Germany.

Jefferson inaugurated the "Virginia Dynasty," his eight years giving way to two terms each of James Madison and James Monroe. He performed his greatest service by purchasing Louisiana from Napoleon in 1803, an act which, though violating his constitutional scruples, carried the flag to the Rockies and vastly enlarged the agricultural domain. With France and England again locked in conflict, depredations on American commerce gave constant provocation to war, but the peace-loving Jefferson applied economic sanctions in the form of an embargo keeping merchantmen at home. Such measures failed, however, and under Madison in 1812 Congress, goaded by the Warhawks, mostly Westerners, declared war on England. Unlike France, she had compounded her offenses by impressing American sailors and, moreover, lay exposed to land attack in Canada. But the assaults on Canada miscarried, and Britain's attempts at counter-invasion with veterans freed by Napoleon's defeat in 1814 fared little better. Unhappily, An-



drew Jackson's victory at New Orleans on January 8, 1815, occurred two weeks too late to affect the Peace Treaty of Ghent, which settled none of the prewar disputes.

Nevertheless the war experience greatly accelerated American nationalism. In 1816 Congress enacted the first protective tariff and chartered a new United States Bank on the model of Hamilton's. In 1819 the country acquired the Gulf region from Spain, who chose to sell rather than have it seized. In 1823 the President, prompted by successful revolutions in Latin America, proclaimed the Monroe Doctrine, warning Europe to keep hands off this new area of freedom.

Other events, however, prefigured growing sectional discord. Opposition to admitting Missouri as a slave state was ended in 1820 only by Congress's agreeing that the rest of the Louisiana Purchase north of the parallel marking her southern boundary should be free soil. Successive tariffs alienated Southerners as class legislation discriminating against their welfare. Tutored by the astute South Carolinian, John C. Calhoun, they refurbished the doctrine of state rights as defensive armor. John Quincy Adams's administration (1825-1829) did nothing to improve conditions, and the advent of his successor, Jackson, precipitated a crisis.

Old Hickory, as indomitable in peace as in war, acted boldly against divisive tendencies, whether from the slavocracy or the money power. When South Carolina nullified the Tariff of 1832, he prepared for military action, whereupon the state accepted Congress's olive branch of a lower scale of duties. He smote financial privilege by destroying the Second United States Bank, which wielded monopolistic control over the nation's credit facilities. After eight years Jackson's lieutenant, Martin Van Buren, took over, but a business depression following the Panic of 1837 so discredited his administration that in 1840 the Whigs uproariously elected William Henry Harrison in the famous log-cabin campaign. He died after a month in office, however, and the Whigs fared hardly better with his unintended successor, John Tyler, whose strict-constructionist predilections foiled their plan to establish a third national bank.

Within the free states these years witnessed a ceaseless ferment of humanitarian agitation: crusades for public education, temperance, prison reform, labor's rights, women's rights. Humane people, viewing slavery as an anachronism and a sin, formed organizations to urge its abolition. The moderate-minded, content with demanding its exclusion from the territories, founded a series of unsuccessful parties, beginning with the election of 1840. The

South, frightened by these threats to its cherished institution, found little good in any of the movements and regarded the restless North with mounting apprehension.

#### 4. Sectional Conflict

Western expansionist zeal plus the Southern desire for more slave territory elected James K. Polk over his Whig rival, Henry Clay, in 1844. When the outgoing Congress executed the Democratic pledge to annex Texas, Polk proceeded to high-pressure England into partitioning the jointly held Oregon country at the forty-ninth parallel, and in 1846, while that was still under way, contrived a war with Mexico to acquire California and the territory eastward to Texas. American forces quickly overran northern Mexico and California, but a fiercely contested march from Veracruz through the mountains to Mexico City proved necessary before Polk achieved his goal in the Treaty of Guadalupe Hidalgo early in 1848.

The conquests approximately completed the present continental boundaries. The immediate effect, however, was to arouse sectional dissention over the question of slavery in the new Southwest. Zachary Taylor, elected by the Whigs in 1848, died in office after sixteen months, leaving the crisis in the lap of Millard Fillmore. The Compromise of 1850, piloted through Congress by Henry Clay, admitted California as a free state, left slavery in Utah and New Mexico territories to future judicial determination, and disposed of other disputes. But the settlement soon turned into unsettlement, for Fillmore's Democratic successors, Franklin Pierce and James Buchanan, supported pro-Southern policies.

The Kansas-Nebraska Act of 1854, authorizing slavery by "popular sovereignty" in the country just west of Missouri and Iowa, outraged Northerners as a base repudiation of the historic Missouri Compromise. Guerrilla warfare followed in Kansas, while in the free states the old-time antislavery elements joined with dissident Whigs and Democrats to organize the Republican party. The Republicans insisted that slavery be kept out of all federal territories. Angry contests on the floors of Congress operated like a war of nerves, convincing each side that the other was plotting its ruin. John Brown's insane attempt in 1859 to incite a servile insurrection merely poured oil on the flames. When the Republicans in 1860 elected Abraham Lincoln over a divided Democratic opposition, eleven slave states, appealing to state-rights principles, seceded and established the Confederate States of America.

For the hostilities that ensued, the North possessed the long-run advantage

of superior economic resources and man power, but before these could come into play, the South hoped to win by military prowess and perhaps by the intervention of England, which needed Southern cotton. England, however, never went quite so far, and the Southern authorities failed also to reckon with the inspired leadership of President Lincoln, who taught his people that the preservation of the Union involved not only their country's future but the democratic hope everywhere. While the North went about establishing a blockade by sea, the Confederates under Robert E. Lee brilliantly repulsed repeated land attacks on their capital, Richmond, and countered with battles on Northern soil at Antietam in 1862 and Gettysburg in 1863. But in the west they steadily lost ground until the Union forces late in 1864 swept around the southern tip of the mountains into Lee's rear and, by a pincers movement with Ulysses S. Grant before Richmond, brought final defeat the following April. As soon as military fortunes favored, Lincoln under his war powers proclaimed the emancipation of slaves in all unconquered states and districts, and the Thirteenth Amendment in 1865 universalized the decree. America at long last had caught up with the preamble of the Declaration of Independence.

Even prior to his re-election in 1864, Lincoln "with malice toward none" announced a plan to ease the return of the Southern states to their former place in the Union; but before much could be accomplished, his assassination in April, 1865, brought into office Andrew Johnson, who shared his views of reconstruction without his gifts of persuasion. Over Johnson's vetoes the radical Republicans adopted a punitive program. They imposed military rule upon the South, impeached and almost ousted the President, and exacted ratification of the Fourteenth and Fifteenth Amendments before readmitting the last states in 1870. These amendments were designed to make the freedman a full-fledged citizen and voter. Even so, federal bayonets kept Northern-controlled carpet-bag governments in power for several years more.

## 5. Business and Government

Already the Republicans were changing from a humanitarian party to one of conservative business. The war gave an immense stimulus to economic life, speeding the construction of railways, the exploitation of minerals and other resources, the development of large-scale manufacturing, the accumulation of wealth, and bringing to the fore great captains of industry and finance, who naturally turned for favors to the dominant party. Despite economic depressions after the Panics of 1873 and 1893, this alliance of business and politics

governed the country almost uninterruptedly for the rest of the century, putting successively into office Grant (for eight years), Rutherford B. Hayes, James A. Garfield, Chester A. Arthur (for Garfield's unexpired term), Benjamin Harrison and William McKinley (for two terms).

In the Hayes-Tilden election of 1876, however, the Republicans nearly came to grief, partly because of revelations of widespread graft in Grant's second administration, and partly because of disputed electoral returns from the surviving carpetbag states. A special commission, created by Congress, decided for Hayes by a strictly partisan vote. The Democrats actually won eight years later, the voters preferring Grover Cleveland to James G. Blaine, whom they suspected of political corruption. Cleveland, though defeated in 1888, triumphed again in 1892 largely because the Republicans had claimed too much for the beneficence of tariff protection. The Republicans avoided other disasters by harping upon Democratic disloyalty during the Civil War ("waving the bloody shirt") and by catering to the Northern veterans' vote with generous pensions.

Conservative Republicanism met its principal difficulties in Congress, where the Western members, supported usually by Southern Democrats, uneasily resisted capitalistic domination. The Farther West, peopling rapidly after the war, gave a fresh dimension to the nation. Thanks to the attractions of precious minerals, cattle raising and free homesteads, this last frontier yielded steadily to settled communities, and between 1876 and 1896 eight additional states entered the Union. A new sectionalism emerged in politics, for Western needs and aspirations differed at many points from those of the East. The wage earners, too, feared the growing power of Big Business, but despite mounting numbers they lacked political representation and hence concentrated on trade-union methods, forming the American Federation of Labor in 1881. The two depression periods produced violent strikes and upheavals. Labor, however, prevailed upon Congress to place restraints on immigration in order to discourage competition by underpaid workers, especially from Southern and Eastern Europe.

Legislative struggles nearly always pivoted on issues affecting the new industrial order. The problem of greenback inflation, arising from the war, was finally settled to Eastern satisfaction by the Resumption Act of 1875. The drive for higher and yet higher protection succeeded with occasional reverses until the Dingley Tariff in 1897 set a record. Congress under Western pressure took ineffective steps in 1887 and 1890 to regulate railways and business combinations, and it made some early concessions also to the Western de-



mand for free silver. During the Panic of 1893, however, Cleveland induced Congress to stop the inflation; and after the silverites, capturing the Democratic convention in 1896, failed to elect their nominee, William Jennings Bryan, the Republicans reduced silver to a minor coin and committed the country to the gold standard.

Foreign relations reflected similar tendencies, for the expanding industrial system demanded new markets, openings for investment and sources of raw materials. Cleveland withstood imperialistic sentiment, and in 1898 the McKinley administration intervened in the Cuban insurrection under the whip of popular anger at Spanish methods of repression and the explosion of the battleship *Maine* in Havana Harbor. Spain was quickly routed not only in the West Indies but also in her possessions off Asia. Though the "splendid little war" was prompted less by Wall Street than by a superheated sensational press, it bore fruit in the annexation of Puerto Rico, the Philippines and Guam, and brought businessmen further advantages through the quasi protectorate imposed on Cuba (later extended to other Caribbean countries). About the same time Hawaii and American Samoa were acquired, and Secretary of State John Hay's "open door" policy promised a growing trade with China. Theodore Roosevelt, raised to the presidency by McKinley's assassination in September, 1901, further advanced the cause by abetting a revolution against Colombia, thereby assuring the construction of the Panama Canal and much shorter distances within the colonial empire.

In domestic politics, however, Roosevelt aligned himself with the rising sentiment against business-dominated government, preaching with gusto the doctrine of the "square deal," and in his seven years breaking ground for later and more substantial advances. Despite party reactionaries he put teeth into the enforcement of the Antitrust Act of 1890, bullied Congress into tightening control over railroads and industrial monopolies, and initiated measures for conserving the nation's natural resources. William Howard Taft, his choice as successor, quietly pursued similar policies; but Taft's endorsement of the steep Payne-Aldrich Tariff together with other missteps so embittered the reformers that, failing to prevent his renomination in 1912, they organized the Progressive party to run their idol "Teddy" again. The Democrats, facing a divided opposition, elected their candidate, Woodrow Wilson.

Superbly endowed intellectually, and gifted with Jefferson's power to express democratic aspirations, Wilson proceeded with magisterial authority to climax the earlier efforts at reform. The Underwood Tariff enacted the lowest rates since the

Civil War; the Federal Reserve Act superseded an outworn national banking system; and the Clayton Act created the Federal Trade Commission to stop "unfair methods of competition." Two other measures, launched by popular demand during World War I, involved changes in the Constitution. The Eighteenth Amendment in 1920 enacted national prohibition, which ran its stormy course in thirteen years and required the Twenty-first for its undoing. The Nineteenth Amendment (1920) extended to all women the suffrage which in some states they already possessed.

## 6. World War and After

With America a neutral in 1914 when the European struggle began, the administration's chief energies turned to the protection of maritime rights. Wilson and his countrymen, hating war and traditionally isolationist, only gradually perceived the threat to national security if a militaristic Germany should supplant Britain as mistress of the Atlantic; but Berlin's revival of ruthless submarine operations a few months after Wilson's second election clarified men's minds. Congress, stirred by his appeal that "The world must be made safe for democracy," declared war on April 6, 1917. The government, racing against time, swiftly put the nation on a battle footing, enacting universal conscription, taking over the railways, and regimenting industry, labor and agriculture. It was the country's introduction to total war. In the summer of 1918 Yankee troops under General John J. Pershing helped repulse a great German drive on the Marne and in September shared in the mighty Meuse-Argonne counteroffensive, which ended the struggle on November 11.

At the Paris Peace Conference, Wilson fought stubbornly for the democratic settlement he had earlier outlined under Fourteen Points, but gained principally his proposal of a League of Nations, which he saw as a sort of continuing peace conference. At home the Republican-controlled Senate, whipping up isolationist sentiment, completed his rout, for when Wilson spurned efforts to amend the treaty, that body under the two-thirds requirement rejected it by a minority vote. The tide was turning from wartime idealism to what Warren G. Harding, overwhelmingly elected by the Republicans in 1920, called "normalcy." Disclosures of corruption in high government circles hastened Harding's death, elevating Calvin Coolidge, who renewed his presidency by election a year later and was followed in 1929 by Herbert Hoover. All three, while keeping out of the League, nevertheless co-operated with some of its minor activities and, on their own, concluded a number of collective treaties for temporary naval disarmament and the outlawry of war.



These part-way steps were offset, however, by an upsurge of economic nationalism: a skyward trend of protective duties, a relaxing of controls over giant corporations, and a quota limitation on European immigration. "Rugged individualism" produced the dizzy prosperity the country had ever known, only to collapse in 1929 into the worst depression ever known. Hoover, striving vainly to repair the damage, met abject defeat in 1932 at the hands of the socially minded Franklin D. Roosevelt, who pledged a "new deal" by the Democrats. Under Roosevelt's thrilling leadership Congress, casting precedent to the winds, voted billions for relief, "primed the pump" of business and agriculture to hasten recovery, and inaugurated long-range reforms to increase foreign trade through reciprocal tariff reductions, reorganize banking practices, safeguard trade-union activities, guarantee minimum wages, destroy electrical holding companies, and provide for social insurance and a government-planned development of the Tennessee Valley.

## 7. World War Again

Toward Latin America Franklin Roosevelt adopted the "good neighbor" policy, relinquishing the Caribbean protectorates and transforming the Monroe Doctrine into a mutual nonaggression pact. As further evidence of the retreat from imperialism, Congress made provision for Philippine freedom in 1946. Relations with other parts of the world, however, posed increasing problems. As the Axis dictators and their Oriental partner, Japan, began overrunning weaker peoples, Congress under isolationist influences directed Roosevelt, against his wish, to embargo munition sales to both victim and assailant; but public opinion forced a lifting of the ban after England and France in September, 1939, took up arms against Nazi aggression. Hitler's subjugation of France the following June emboldened Roosevelt to more active steps, for crippled England now alone defended the Atlantic from totalitarian domination. Congress at his behest voted vast sums for rearmament and adopted peacetime conscription, and Roosevelt, without consulting Congress, gave England fifty destroyers in exchange for a string of naval bases off North America.

Isolationists, mostly Republicans, denounced Roosevelt's "warmongering," while he, still clinging to measures "short of war," stressed insistently the gathering dangers to the American way of life—to freedom of speech, freedom of worship, freedom from want and freedom from fear. The people responded by choosing him in 1940 as their first third-term President. In March, 1941, he secured adoption of the lend-lease plan and soon began using the navy to safeguard the supplies en route.

Before matters reached a crisis, the Japanese war lords, irked by America's stiffening attitude toward their own conquests and gambling upon an Axis victory in Europe, treacherously attacked Pearl Harbor on December 7, clearing the way for the seizure of Guam, the Philippines and two of the Aleutians, as well as many Dutch and British holdings. Within four days Germany and Italy declared war against the United States.

America quickly girded herself for the mightiest struggle in history. Enlarging upon Wilson's wartime methods, the government completely reorganized the national economy for an unparalleled output of arms and food. By summer, sea, land and air forces were attacking the enemy all over the globe. In May, 1943, after bitter fighting, Anglo-American armies expelled the Axis from North Africa, then invaded southern Italy and forced the government's submission in September, though the Nazis there kept up the fight. Landing in Normandy in June, 1944, the Allies under Dwight D. Eisenhower's supreme command battered their way through France and across the Rhine, while the Russians pounded the Nazis from the east. On May 7, 1945, Germany unconditionally surrendered. The Pacific war was no less desperately contested; but the Allies, based on Australia, slowly won control of the sea and, pressing onward from island to island, hastened Japan's unconditional surrender on August 14, 1945, by loosing the atomic bomb and by Soviet Russia's last-minute entry into the conflict.

World War II was at an end, but what would be the nature of the peace? The Atlantic Charter, signed in August, 1941, by Roosevelt and Churchill and later agreed to by all the Allies, pledged them against "aggrandizement, territorial or other," but subsequent conferences by the major powers—at Cairo, Teheran, Yalta, Potsdam and elsewhere—foreshadowed a different outcome. Russia in particular demanded substantial territorial advantages. In July, 1946, the Allies gathered at Paris to draw up terms for Italy and the Axis satellites: Rumania, Bulgaria, Hungary and Finland. Germany and Japan, under armed occupation, were reserved for later handling.

Without waiting for final military victory, fifty countries, at Roosevelt's initiative and with bipartisan support in America, had set up a successor to the League: the United Nations. Roosevelt, elected a fourth time in 1944, died suddenly on April 12, 1945, several weeks too soon to assist in framing the charter at San Francisco.

His successor, Harry S. Truman, urged a broadened New Deal under the name Fair Deal but met with limited success, partly because of a coalition of Republi-

cans and Southern Democrats in Congress, partly because of mounting world crises. His tax program, accentuated by growing national-defense requirements, was considerably altered; and his labor program was defeated by the enactment, over his veto, of the Taft-Hartley law. In spite of strong Republican opposition, the rise of a States' Rights Democratic party in the South, and poll predictions of certain defeat, Truman was the people's choice in 1948. The Twenty-second Amendment, ratified during his second administration and limiting Presidents to two terms or ten years, did not apply to him.

Domestic affairs became secondary to increasingly acute world problems involving communism. As more nations came under Soviet domination, the concept of "One World" dimmed. A new policy, designed to contain communism within its existing limits and to prevent its spread by aggression, was evolved. Under this, the United States gave military and economic aid to Greece and Turkey, implemented the Marshall Plan with billions of dollars to speed European recovery and to halt the growth of communism, fostered the regeneration of Western Germany, negotiated the North Atlantic Defense Pact, and assisted Western Europe militarily. When Tito and Yugoslavia broke with the U.S.S.R. and the

Cominform, the United States rendered economic aid.

In advancing its policies both before and after these American-sponsored measures, Moscow embarked upon the Cold War. Its blockade of Berlin necessitated the successful Anglo-American Airlift. It backed Communist activities in European countries, nursed rebellions in Asia and sabotaged the United Nations by its use of the veto. A peak of its offensive was reached when it supported North Korea and Red China with arms in their invasion of South Korea. This action caused the United States to co-operate with the United Nations in a massive police action, under General Douglas MacArthur, against the Reds. In spite of Russian opposition, a peace treaty was also concluded with Japan. The Republicans, abandoning the World War II bipartisan foreign policy, attacked the State Department and Secretary Dean Acheson, and seized upon Truman's recall of MacArthur for insubordination as the occasion for a senatorial investigation of Far Eastern policy.

During the tense period of the Cold War, American Communist-party leaders were convicted of conspiring against the United States, and several persons were found guilty of supplying Russia with atom-bomb secrets.

(Recent events are covered in our *Headline History of Our Times* and in the *News Record of 1954*.)

### Electoral Vote by States

Alabama .....	11	Nebraska .....	6
Arizona .....	4	Nevada .....	3
Arkansas .....	8	New Hampshire ..	4
California .....	32	New Jersey .....	16
Colorado .....	6	New Mexico .....	4
Connecticut .....	8	New York .....	45
Delaware .....	3	North Carolina ..	14
Florida .....	10	North Dakota .....	4
Georgia .....	12	Ohio .....	25
Idaho .....	4	Oklahoma .....	8
Illinois .....	27	Oregon .....	6
Indiana .....	13	Pennsylvania .....	32
Iowa .....	10	Rhode Island .....	4
Kansas .....	8	South Carolina ..	8
Kentucky .....	10	South Dakota .....	2
Louisiana .....	10	Tennessee .....	11
Maine .....	5	Texas .....	21
Maryland .....	9	Utah .....	4
Massachusetts .....	16	Vermont .....	3
Michigan .....	20	Virginia .....	12
Minnesota .....	11	Washington .....	9
Mississippi .....	8	West Virginia .....	8
Missouri .....	13	Wisconsin .....	12
Montana .....	4	Wyoming .....	3

NOTE: Each state has as many electoral votes as it has U. S. Senators and Representatives. The 48 states have a total of 531 votes.

### Portraits and Designs of U. S. Paper Currency

Denomination	Portrait	Design on back
\$1	Washington	ONE between obverse and reverse of Great Seal of U. S.
\$2	Jefferson	Monticello.
\$5	Lincoln	Lincoln Memorial.
\$10	Hamilton	U. S. Treasury Building.
\$20	Jackson	White House.
\$50	Grant	U. S. Capitol.
\$100	Franklin	Independence Hall.
\$500	McKinley	Ornate FIVE HUNDRED across.
\$1,000	Cleveland	Ornate ONE THOUSAND across.
\$5,000	Madison	Ornate FIVE THOUSAND across.
\$10,000	Chase	Ornate TEN THOUSAND across.
\$100,000*	Wilson	100,000 superimposed over dollar sign.

\* For use only in transactions between Federal Reserve System and Treasury Department.



# THE DECLARATION OF INDEPENDENCE

IN CONGRESS, JULY 4, 1776

## THE UNANIMOUS DECLARATION of the thirteen united STATES of AMERICA.

**W**HEN in the Course of human events it becomes necessary for one people to dissolve the political bands which have connected them with another, and to assume among the powers of the earth, the separate and equal station to which the Laws of Nature and of Nature's God entitle them, a decent respect to the opinions of mankind requires that they should declare the causes which impel them to the separation.

We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty and the pursuit of Happiness.—That to secure these rights, Governments are instituted among Men, deriving their just powers from the consent of the governed,—That whenever any Form of Government becomes destructive of these ends, it is the Right of the People to alter or to abolish it, and to institute new Government, laying its foundation on such principles and organizing its powers in such form, as to them shall seem most likely to effect their Safety and Happiness. Prudence, indeed, will dictate that Governments long established should not be changed for light and transient causes; and accordingly all experience hath shewn that mankind are more disposed to suffer, while evils are sufferable, than to right themselves by abolishing the forms to which they are accustomed. But when a long train of abuses and usurpations, pursuing invariably the same Object evinces a design to reduce them under absolute Despotism, it is their right, it is their duty, to throw off such Government, and to provide new Guards for their future security.—Such has been the patient sufferance of these Colonies; and such is now the necessity which constrains them to alter their former Systems of Government. The history of the present King of Great Britain is a history of repeated injuries and usurpations, all having in direct object the establishment of an absolute Tyranny over these States. To prove this, let Facts be submitted to a candid world.

He has refused his Assent to Laws, the most wholesome and necessary for the public good.

He has forbidden his Governors to pass Laws of immediate and pressing importance, unless suspended in their operation till his Assent should be obtained; and when so suspended, he has utterly neglected to attend to them.

He has refused to pass other Laws for the accommodation of large districts of people, unless those people would relinquish the right of Representation in the Legislature, a right inestimable to them and formidable to tyrants only.

He has called together legislative bodies at places unusual, uncomfortable, and distant from the depository of their Public Records, for the sole purpose of fatiguing them into compliance with his measures.

He has dissolved Representative Houses repeatedly, for opposing with manly firmness his invasions on the rights of the people.

He has refused for a long time, after such dissolutions, to cause others to be elected; whereby the Legislative Powers, incapable of Annihilation, have returned to the People at large for their exercise; the State remaining in the mean time exposed to all the dangers of invasion from without, and convulsions within.

**NOTE:** On April 12, 1776, the legislature of North Carolina authorized its delegates to the Continental Congress to join with others in a declaration of separation from Great Britain; the first colony to instruct its delegates to take the actual initiative was Virginia on May 15. On June 7, 1776, Richard Henry Lee of Virginia offered a resolution to the Congress to the effect "that these United Colonies are, and of right ought to be, free and independent States. . . ." A committee, consisting of Thomas Jefferson, John Adams, Benjamin Franklin, Robert R. Livingston and Roger

Sherman was organized to "prepare a declaration to the effect of the said first resolution." The Declaration of Independence was adopted on July 4, 1776.

Most delegates signed the Declaration August 2, but George Wythe (Va.) signed August 27; Richard Henry Lee (Va.), Elbridge Gerry (Mass.) and Oliver Wolcott (Conn.) in September; Matthew Thornton (N. H.), not a delegate until September, in November; and Thomas McKean (Del.), although present on July 4, not until 1781 by special permission, having served in the army in the interim.



He has endeavoured to prevent the population of these States; for that purpose obstructing the Laws for Naturalization of Foreigners; refusing to pass others to encourage their migrations hither, and raising the conditions of new Appropriations of Lands.

He has obstructed the Administration of Justice, by refusing his Assent to Laws for establishing Judiciary Powers.

He has made Judges dependent on his Will alone, for the tenure of their offices, and the amount and payment of their salaries.

He has erected a multitude of New Offices, and sent hither swarms of Officers to harass our people, and eat out their substance.

He has kept among us, in times of peace, Standing Armies without the Consent of our legislatures.

He has affected to render the Military independent of and superior to the Civil Power.

He has combined with others to subject us to a jurisdiction foreign to our constitution, and unacknowledged by our laws; giving his Assent to their Acts of pretended Legislation:

For quartering large bodies of armed troops among us:

For protecting them, by a mock Trial, from punishment for any Murders which they should commit on the Inhabitants of these States:

For cutting off our Trade with all parts of the world:

For imposing Taxes on us without our Consent:

For depriving us in many cases, of the benefits of Trial by Jury:

For transporting us beyond Seas to be tried for pretended offences:

For abolishing the free System of English Laws in a neighbouring Province, establishing therein an Arbitrary government, and enlarging its Boundaries so as to render it at once an example and fit instrument for introducing the same absolute rule into these Colonies:

For taking away our Charters, abolishing our most valuable Laws and altering fundamentally the Forms of our Governments:

For suspending our own Legislatures, and declaring themselves invested with power to legislate for us in all cases whatsoever.

He has abdicated Government here, by declaring us out of his Protection and waging War against us.

He has plundered our seas, ravaged our Coasts, burnt our towns, and destroyed the lives of our people.

He is at this time transporting large Armies of foreign Mercenaries to compleat the works of death, desolation and tyranny, already begun with circumstances of Cruelty & Perfidy scarcely paralleled in the most barbarous ages, and totally unworthy the Head of a civilized nation.

He has constrained our fellow Citizens taken Captive on the high Seas to bear Arms against their Country, to become the executioners of their friends and Brethren, or to fall themselves by their Hands.

He has excited domestic insurrections amongst us, and has endeavoured to bring on the inhabitants of our frontiers, the merciless Indian Savages, whose known rule of warfare, is an undistinguished destruction of all ages, sexes and conditions.

In every stage of these Oppressions We have Petitioned for Redress in the most humble terms: Our repeated Petitions have been answered only by repeated injury. A Prince, whose character is thus marked by every act which may define a Tyrant, is unfit to be the ruler of a free people.

Nor have We been wanting in attentions to our Brittish brethren. We have warned them from time to time of attempts by their legislature to extend an unwarrantable jurisdiction over us. We have reminded them of the circumstances of our emigration and settlement here. We have appealed to their native justice and magnanimity, and and we have conjured them by the ties of our common kindred to disavow these usurpations, which would inevitably interrupt our connections and correspondence. They too have been deaf to the voice of justice and of consanguinity. We must, therefore, acquiesce in the necessity, which denounces our Separation, and hold them, as we hold the rest of mankind, Enemies in War, in Peace Friends.

WE, THEREFORE, the Representatives of the UNITED STATES OF AMERICA, in General Congress, Assembled, appealing to the Supreme Judge of the world for the rectitude of our intentions, do, in the Name, and by Authority of the good People of these Colonies, solemnly publish and declare, That these United Colonies are, and of Right ought to be

FREE AND INDEPENDENT STATES; that they are Absolved from all Allegiance to the British Crown, and that all political connection between them and the State of Great Britain, is and ought to be totally dissolved; and that as Free and Independent States, they have full Power to levy War, conclude Peace, contract Alliances, establish Commerce, and to do all other Acts and Things which Independent States may of right do.—And for the support of this Declaration, with a firm reliance on the protection of Divine Providence, we mutually pledge to each other our Lives, our Fortunes and our sacred Honor.

JOHN HANCOCK.

*New Hampshire.*

Josiah Bartlett,  
Wm. Whipple,  
Matthew Thornton.

*Rhode Island.*

Step. Hopkins,  
William Ellery.

*Connecticut.*

Roger Sherman,  
Sam'l Huntington,  
Wm. Williams,  
Oliver Wolcott.

*New York.*

Wm. Floyd,  
Phil. Livingston,  
Frans. Lewis,  
Lewis Morris.

*New Jersey.*

Richd. Stockton,  
Jno. Witherspoon,  
Fras. Hopkinson,  
John Hart,  
Abra. Clark.

*Pennsylvania.*

Robt. Morris,  
Benjamin Rush,  
Benja. Franklin,  
John Morton,  
Geo. Clymer,  
Jas. Smith,  
Geo. Taylor,  
James Wilson,  
Geo. Ross.

*Massachusetts-Bay.*

Saml. Adams,  
John Adams,  
Robt. Treat Paine,  
Elbridge Gerry.

*Delaware.*

Caesar Rodney,  
Geo. Read,  
Tho. M'Kean.

*Maryland.*

Samuel Chase,  
Wm. Paca,  
Thos. Stone,  
Charles Carroll of Carrollton.

*Virginia.*

George Wythe,  
Richard Henry Lee,  
Th. Jefferson,  
Benja. Harrison,  
Ths. Nelson, Jr.,  
Francis Lightfoot Lee,  
Carter Braxton.

*North Carolina.*

Wm. Hooper,  
Joseph Hewes,  
John Penn.

*South Carolina.*

Edward Rutledge,  
Thos. Heyward, Junr.,  
Thomas Lynch, Junr.,  
Arthur Middleton.

*Georgia.*

Button Gwinnett,  
Lyman Hall,  
Geo. Walton.

IN CONGRESS

JANUARY, 18, 1777.

*Ordered:*

That an authenticated copy of the Declaration of Independency, with the names of the Members of Congress subscribing the same, be sent to each of the United States, and that they be desired to have the same put on record.

By order of Congress.

Attest, CHAS. THOMSON, *Secy.* A true copy. JOHN HANCOCK, *Presidt.*

## The Statue of Liberty

The Statue of Liberty ("Liberty Enlightening the World") is a 225-ton copper female figure, 152 ft. 5 in. in height, facing the ocean from Bedloe's Island in New York Harbor. The right hand holds aloft a torch, and the left hand carries a tablet upon which is inscribed: "July 4, 1776."

The statue was designed by Frédéric Auguste Bartholdi, at the request of the French government, as a present to the U. S. to commemorate the centennial of American independence. It cost \$450,000.

The pedestal, 151 ft. 1 in. in height, was erected by the U. S., and its cost of \$350,000 was met by popular subscription in this country. The cornerstone was laid Aug.

5, 1884, and the unveiling of the statue took place Oct. 28, 1886.

On a tablet inside the main entrance of the pedestal is engraved the following sonnet, written by Emma Lazarus:

*The New Colossus*

Not like the brazen giant of Greek fame,  
With conquering limbs astride from land to land;  
Here at our sea-washed, sunset gates shall stand  
A mighty woman with a torch, whose flame  
Is the imprisoned lightning, and her name  
Mother of Exiles. From her beacon hand  
Glooms world-wide welcome; her mild eyes com-  
mand  
The air-bridged harbor that twin cities frame.  
"Keep, ancient lands, your storied pomp!" cries she  
With silent lips. "Give me your tired, your poor,  
Your huddled masses yearning to breathe free,  
The wretched refuse of your teeming shore.  
Send these, the homeless, tempest-tost to me,  
I lift my lamp beside the golden door."

## CONSTITUTION of the UNITED STATES OF AMERICA

THE oldest federal constitution in existence was framed by a convention of delegates from twelve of the thirteen original states in Philadelphia in May 1787, Rhode Island failing to send a delegate. George Washington presided over the session, which lasted until September 17, 1787. The draft (originally a preamble and seven Articles) was submitted to all thirteen states and was to become effective when ratified by nine states. It went into effect on the first Wednesday in March 1789, having been ratified by New Hampshire, the ninth state to approve, on June 21, 1788. The states ratified the Constitution in the following order:

Delaware	December 7, 1787	South Carolina	May 23, 1788
Pennsylvania	December 12, 1787	New Hampshire	June 21, 1788
New Jersey	December 18, 1787	Virginia	June 25, 1788
Georgia	January 2, 1788	New York	July 26, 1788
Connecticut	January 9, 1788	North Carolina	November 21, 1789
Massachusetts	February 6, 1788	Rhode Island	May 29, 1790
Maryland	April 28, 1788		

### Outline of the Constitution

#### ARTICLE I

SEC. 1. Legislative powers; in whom vested.

SEC. 2. House of Representatives, how and by whom chosen—Qualifications of a Representative—Representatives and direct taxes, how apportioned—Enumeration—Vacancies to be filled—Power of choosing officers, and of impeachment.

SEC. 3. Senators, how and by whom chosen—How classified—State Executive, when to make temporary appointments, in case, etc.—Qualifications of a Senator—President of the Senate, his right to vote—President pro tem., and other officers of the Senate, how chosen—Power to try impeachments—When President is tried, Chief Justice to preside—Sentence.

SEC. 4. Times, etc., of holding elections, how prescribed—At least one Session in each year.

SEC. 5. Membership—Quorum—Adjournments—Rules—Power to punish or expel—Journal—Time of adjournments, how limited, etc.

SEC. 6. Compensation—Privileges—Disqualification in certain cases.

SEC. 7. House to originate all revenue bills—Veto—Bill may be passed by two-thirds of each house, notwithstanding, etc.—Bill, not returned in ten days, to become a law—Provisions as to orders, concurrent resolutions, etc.

SEC. 8. Powers of Congress.

SEC. 9. Provision as to migration or importation of certain persons—Habeas Corpus—Bills of attainder, etc.—Taxes, how apportioned—No export duty—No commercial preference—Money, how drawn from treasury, etc.—No titular nobility—Officers not to receive presents, etc.

SEC. 10. States prohibited from the exercise of certain powers.

#### ARTICLE II

SEC. 1. President; his term of office—Electors of President; number and how appointed—Electors to vote on same day—Qualification of President—On whom his duties devolve in case of his removal, death, etc.—President's compensation—His oath of office.

SEC. 2. President to be commander in chief—He may require opinions of Cabinet Officers, etc., may pardon—Treaty-making power—Nomination of certain officers—When President may fill vacancies.

SEC. 3. President shall communicate to Congress—He may convene and adjourn Congress, in case of disagreement, etc.—Shall receive ambassadors, execute laws, and commission officers.

SEC. 4. All civil offices forfeited for certain crimes.

#### ARTICLE III

SEC. 1. Judicial powers—Tenure—Compensation.

SEC. 2. Judicial power; to what cases it extends—Original jurisdiction of Supreme Court—Appellate—Trial by jury, etc.—Trial, where.

SEC. 3. Treason defined—Proof of—Punishment of.

#### ARTICLE IV

SEC. 1. Each State to give credit to the public acts, etc., of every other State.

SEC. 2. Privileges of citizens of each State—Fugitives from justice to be delivered up—Persons held to service having escaped, to be delivered up.

SEC. 3. Admission of new States—Power of Congress over territory and other property.

SEC. 4. Republican form of government guaranteed—Each State to be protected.



## ARTICLE V

Constitution; how amended—Proviso.

## ARTICLE VI

Certain debts, etc., declared valid—Supremacy of Constitution, treaties, and laws of the United States—Oath to support Constitution, by whom taken—No religious test.

## ARTICLE VII

What ratification shall establish Constitution.

## AMENDMENTS

- I. Religious establishment prohibited—Freedom of speech, of the press, and right to petition.
- II. Right to keep and bear arms.
- III. No soldier to be quartered in any house, unless, etc.
- IV. Right of search and seizure regulated.
- V. Provisions concerning prosecution, trial and punishment—Private property not to be taken for public use, without compensation.
- VI. Further provision respecting criminal prosecutions.
- VII. Right of trial by jury secured.

VIII. Excessive bail or fines and cruel punishments prohibited.

IX. Rule of construction of Constitution.

X. Same subject; rights of States.

XI. Same subject; judicial powers construed.

XII. Manner of choosing President and Vice President.

XIII. Slavery abolished.

XIV. Citizenship; representation—Public debt.

XV. Right of suffrage—By whom exercised.

XVI. Taxes on incomes.

XVII. Election of Senators—Filling of vacancies.

XVIII. Prohibition.

XIX. Suffrage; not to be denied because of sex.

XX. Commencement of terms of President, Vice President and members of Congress; time of assembling of Congress.

XXI. Repeal of Prohibition.

XXII. No person to serve as President for more than two terms.

## The Constitution of the United States of America

**P**REAMBLE.—WE THE PEOPLE of the United States, in Order to form a more perfect Union, establish Justice, insure domestic Tranquility, provide for the common defence, promote the general Welfare, and secure the Blessings of Liberty to ourselves and our Posterity, do ordain and establish this Constitution for the United States of America.

## ARTICLE I

## Section 1

Legislative powers vested in Congress.—All legislative Powers herein granted shall be vested in a Congress of the United States, which shall consist of a Senate and House of Representatives.

## Section 2

Composition of the House of Representatives.—1. The House of Representatives shall be composed of Members chosen every second Year by the People of the several States, and the Electors in each State shall have the Qualifications requisite for Electors of the most numerous Branch of the State Legislature.

Qualifications of Representatives.—2. No Person shall be a Representative who shall not have attained to the Age of twenty-five Years, and been seven Years a Citizen

of the United States, and who shall not, when elected, be an Inhabitant of that State in which he shall be chosen.

Apportionment of Representatives and direct taxes—census.\*—3. [Representatives and direct Taxes shall be apportioned among the several States which may be included within this Union, according to their respective Numbers, which shall be determined by adding to the whole Number of free Persons, including those bound to Service for a Term of Years, and excluding Indians not taxed, three fifths of all other Persons.] The actual Enumeration shall be made within three Years after the first Meeting of the Congress of the United States, and within every subsequent Term of ten Years, in such Manner as they shall by Law direct. The Number of Representatives shall not exceed one for every thirty Thousand, but each State shall have at Least one Representative; and until such enumeration shall be made, the State of New Hampshire shall be entitled to chuse three, Massachusetts eight, Rhode-Island and Providence Plantations one, Connecticut five, New York six, New Jersey four, Pennsylvania eight, Delaware one, Maryland six, Virginia ten, North Carolina five, South Carolina five, and Georgia three.

Filling of vacancies in representation.—4. When vacancies happen in the Representation from any State, the Executive

\* The clause included in brackets is amended by the 14th Amendment, Section 2.

Authority thereof shall issue Writs of Election to fill such Vacancies.

**Selection of officers; power of impeachment.**—5. The House of Representatives shall chuse their Speaker and other Officers; and shall have the sole Power of Impeachment.

### Section 3\*

**The Senate.**—[1. The Senate of the United States shall be composed of two Senators from each State, chosen by the Legislature thereof, for six Years; and each Senator shall have one Vote.]

**Classification of Senators; filling of vacancies.**—2. Immediately after they shall be assembled in Consequence of the first Election, they shall be divided as equally as may be into three Classes. The Seats of the Senators of the first Class shall be vacated at the Expiration of the second Year, of the second Class at the Expiration of the fourth Year, and of the third Class at the Expiration of the sixth Year, so that one-third may be chosen every second Year; and if Vacancies happen by Resignation, or otherwise, during the Recess of the Legislature of any State, the Executive thereof may make temporary Appointments [until the next Meeting of the Legislature, which shall then fill such Vacancies].

**Qualification of Senators.**—3. No Person shall be a Senator who shall not have attained to the Age of thirty Years, and been nine Years a Citizen of the United States, and who shall not, when elected, be an Inhabitant of that State for which he shall be chosen.

**Vice President to be President of Senate.**—4. The Vice President of the United States shall be President of the Senate, but shall have no Vote, unless they be equally divided.

**Selection of Senate officers; President pro tempore.**—5. The Senate shall chuse their other Officers, and also a President pro tempore, in the Absence of the Vice President, or when he shall exercise the Office of President of the United States.

**Senate to try Impeachments.**—6. The Senate shall have the sole Power to try all Impeachments. When sitting for that Purpose, they shall be on Oath or Affirmation. When the President of the United States is tried, the Chief Justice shall preside: And no Person shall be convicted without the Concurrence of two thirds of the Members present.

**Judgment in cases of impeachment.**—7. Judgment in Cases of Impeachment shall not extend further than to removal from Office, and disqualification to hold and en-

joy any Office of honor, Trust, or Profit under the United States: but the Party convicted shall nevertheless be liable and subject to Indictment, Trial, Judgment and Punishment, according to Law.

### Section 4

**Control of congressional elections.**—1. The Times, Places and Manner of holding Elections for Senators and Representatives, shall be prescribed in each State by the Legislature thereof; but the Congress may at any time by Law make or alter such Regulations, except as to the Places of chusing Senators.

**Time for assembling of Congress.**—2. The Congress shall assemble at least once in every Year, and such Meeting shall be on the first Monday in December, unless they shall by Law appoint a different Day.

### Section 5

**Each house to be the judge of the election and qualifications of its members; regulations as to quorum.**—1. Each House shall be the Judge of the Elections, Returns and Qualifications of its own Members, and a Majority of each shall constitute a Quorum to do Business; but a smaller Number may adjourn from day to day, and may be authorized to compel the Attendance of absent Members, in such Manner, and under such Penalties as each House may provide.

**Each house to determine its own rules.**—2. Each House may determine the Rules of its Proceedings, punish its Members for disorderly Behaviour, and, with the Concurrence of two thirds, expel a Member.

**Journals and yeas and nays.**—3. Each House shall keep a Journal of its Proceedings, and from time to time publish the same, excepting such Parts as may in their Judgment require Secrecy; and the Yeas and Nays of the Members of either House on any question shall, at the Desire of one fifth of those Present, be entered on the Journal.

**Adjournment.**—4. Neither House, during the Session of Congress shall, without the Consent of the other, adjourn for more than three days, nor to any other Place than that in which the two Houses shall be sitting.

### Section 6

**Compensation and privileges of Members of Congress.**—1. The Senators and Representatives shall receive a Compensation for their Services, to be ascertained by Law, and paid out of the Treasury of the United States. They shall in all Cases, except Treason, Felony and Breach of the

\* The 1st paragraph of this section and as much of the 2nd paragraph as relates to filling vacancies are amended by the 17th Amendment.

† Amended by the 20th Amendment, Section 2.



Peace, be privileged from Arrest during their Attendance at the Session of their respective Houses, and in going to and returning from the same; and for any Speech or Debate in either House, they shall not be questioned in any other Place.

**Incompatible offices; exclusions.**—2. No Senator or Representative shall, during the Time for which he was elected, be appointed to any civil Office under the Authority of the United States, which shall have been created, or the Emoluments whereof shall have been increased during such time; and no Person holding any Office under the United States, shall be a Member of either House during his Continuance in Office.

#### Section 7

**Revenue bills to originate in House.**—1. All Bills for raising Revenue shall originate in the House of Representatives; but the Senate may propose or concur with Amendments as on other Bills.

**Manner of passing bills; veto power of President.**—2. Every Bill which shall have passed the House of Representatives and the Senate, shall, before it becomes a Law, be presented to the President of the United States; If he approve he shall sign it, but if not he shall return it, with his Objections to that House in which it shall have originated, who shall enter the Objections at large on their Journal, and proceed to reconsider it. If after such Reconsideration two thirds of that House shall agree to pass the Bill, it shall be sent, together with the Objections, to the other House, by which it shall likewise be reconsidered, and if approved by two thirds of that House, it shall become a Law. But in all such Cases the Votes of both Houses shall be determined by Yeas and Nays, and the Names of the Persons voting for and against the Bill shall be entered on the Journal of each House respectively. If any Bill shall not be returned by the President within ten Days (Sundays excepted) after it shall have been presented to him, the Same shall be a Law, in like Manner as if he had signed it, unless the Congress by their Adjournment prevent its Return, in which Case it shall not be a Law.

**Concurrent orders or resolutions, to be passed by President.**—3. Every Order, Resolution, or Vote to which the Concurrence of the Senate and House of Representatives may be necessary (except on a question of adjournment) shall be presented to the President of the United States; and before the Same shall take Effect, shall be approved by him, or being disapproved by him, shall be repassed by two thirds of the Senate and House of Representatives, according to the Rules and Limitations prescribed in the Case of a Bill.

#### Section 8

##### General powers of Congress.\*

The Congress shall have Power.—1. To lay and collect Taxes, Duties, Imposts and Excises, to pay the Debts and provide for the common Defence and general Welfare of the United States; but all Duties, Imposts and Excises shall be uniform throughout the United States;

**Borrowing of money.**—2. To borrow Money on the credit of the United States;

**Regulation of commerce.**—3. To regulate Commerce with foreign Nations, and among the several States, and with the Indian Tribes;

**Naturalization and bankruptcy.**—4. To establish a uniform Rule of Naturalization, and uniform Laws on the subject of Bankruptcies throughout the United States;

**Money, weights and measures.**—5. To coin Money, regulate the Value thereof, and of foreign Coin, and fix the Standard of Weights and Measures;

**Counterfeiting.**—6. To provide for the Punishment of counterfeiting the Securities and current Coin of the United States;

**Post offices.**—7. To establish Post Offices and post Roads;

**Patents and copyrights.**—8. To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries;

**Inferior courts.**—9. To constitute Tribunals inferior to the supreme Court;

**Piracies and felonies.**—10. To define and punish Piracies and Felonies committed on the high Seas, and Offences against the Law of Nations;

**War; marque and reprisal.**—11. To declare War, grant Letters of Marque and Reprisal, and make Rules concerning Captures on Land and Water;

**Armies.**—12. To raise and support Armies, but no Appropriation of Money to that Use shall be for a longer Term than two Years;

**Navy.**—13. To provide and maintain a Navy;

**Land and naval forces.**—14. To make Rules for the Government and Regulation of the land and naval Forces;

**Calling out militia.**—15. To provide for calling forth the Militia to execute the Laws of the Union, suppress Insurrections and repel Invasions;

**Organizing, arming and disciplining militia.**—16. To provide for organizing, arming, and disciplining, the Militia, and for governing such Part of them as may be

\* By the 16th Amendment, Congress is given the power to lay and collect taxes on incomes.



employed in the Service of the United States, reserving to the States respectively, the Appointment of the Officers, and the Authority of training the Militia according to the discipline prescribed by Congress;

**Exclusive legislation over District of Columbia.**—17. To exercise exclusive Legislation in all Cases whatsoever, over such District (not exceeding ten Miles square) as may, by Cession of particular States, and the Acceptance of Congress, become the Seat of the Government of the United States, and to exercise like Authority over all Places purchased by the Consent of the Legislature of the State in which the Same shall be, for the Erection of Forts, Magazines, Arsenals, dock-Yards, and other needful Buildings;—And

To enact laws necessary to enforce Constitution.—18. To make all Laws which shall be necessary and proper for carrying into Execution the foregoing Powers, and all other Powers vested by this Constitution in the Government of the United States, or in any Department or Officer thereof.

#### Section 9

**Migration or importation of certain persons not to be prohibited before 1808.**—1. The Migration or Importation of such Persons as any of the States now existing shall think proper to admit, shall not be prohibited by the Congress prior to the Year one thousand eight hundred and eight, but a Tax or duty may be imposed on such Importation, not exceeding ten dollars for each Person.

**Writ of habeas corpus not to be suspended; exception.**—2. The Privilege of the Writ of Habeas Corpus shall not be suspended, unless when in Cases of Rebellion or Invasion the public Safety may require it.

**Bills of attainder and ex post facto laws prohibited.**—3. No Bill of Attainder or ex post facto Law shall be passed.

**Capitation and other direct taxes.**—4. No Capitation, or other direct, Tax shall be laid, unless in Proportion to the Census or Enumeration herein before directed to be taken.\*

**Exports not to be taxed.**—5. No Tax or Duty shall be laid on Articles exported from any State.

**No preference to be given to ports of any State; interstate shipping.**—6. No Preference shall be given by any Regulation of Commerce or Revenue to the Ports of one State over those of another: nor shall Vessels bound to, or from, one State, be obliged to enter, clear, or pay Duties in another.

**Money, how drawn from treasury; finan-**

**cial statements to be published.**—7. No Money shall be drawn from the Treasury, but in Consequence of Appropriations made by Law; and a regular Statement and Account of the Receipts and Expenditures of all public Money shall be published from time to time.

**Titles of nobility not to be granted; acceptance by government officers of favors from foreign powers.**—8. No Title of Nobility shall be granted by the United States: And no Person holding any Office of Profit or Trust under them, shall, without the Consent of the Congress, accept of any present, Emolument, Office, or Title, of any kind whatever, from any King, Prince, or foreign State.

#### Section 10

**Limitations of the powers of the several States.**—1. No State shall enter into any Treaty, Alliance, or Confederation; grant Letters of Marque and Reprisal; coin Money; emit Bills of Credit; make any Thing but gold and silver Coin a Tender in Payment of Debts; pass any Bill of Attainder, ex post facto Law, or Law impairing the Obligation of Contracts, or grant any Title of Nobility.

**State imposts and duties.**—2. No State shall, without the Consent of the Congress, lay any Imposts or Duties on Imports or Exports, except what may be absolutely necessary for executing its inspection Laws: and the net Produce of all Duties and Imposts, laid by any State on Imports or Exports, shall be for the Use of the Treasury of the United States; and all such Laws shall be subject to the Revision and Control of the Congress.

**Further restrictions on powers of States.**

—3. No State shall, without the Consent of Congress, lay any Duty of Tonnage, keep Troops, or Ships of War in time of Peace, enter into any Agreement or Compact with another State, or with a foreign Power, or engage in War, unless actually invaded, or in such imminent Danger as will not admit of delay.

## ARTICLE II

#### Section 1

**The President; the executive power.**—1. The executive Power shall be vested in a President of the United States of America. He shall hold his Office during the Term of four Years, and, together with the Vice President, chosen for the same Term, be elected, as follows

**Appointment and qualifications of presidential electors.**—2. Each State shall appoint, in such Manner as the Legislature thereof may direct, a Number of Electors, equal to the whole Number of Senators and

\* See the 16th Amendment.

Representatives to which the State may be entitled in the Congress: but no Senator or Representative, or Person holding an Office of Trust or Profit under the United States, shall be appointed an Elector.

**Original method of electing the President and Vice-President.\***—[The Electors shall meet in their respective States, and vote by Ballot for two Persons, of whom one at least shall not be an Inhabitant of the same State with themselves. And they shall make a List of all the Persons voted for, and of the Number of Votes for each; which List they shall sign and certify, and transmit sealed to the Seat of the Government of the United States, directed to the President of the Senate. The President of the Senate shall, in the Presence of the Senate and House of Representatives, open all the Certificates, and the Votes shall then be counted. The Person having the greatest Number of Votes shall be the President, if such Number be a Majority of the whole Number of Electors appointed; and if there be more than one who have such Majority, and have an equal Number of Votes, then the House of Representatives shall immediately chuse by Ballot one of them for President; and if no person have a Majority, then from the five highest on the List the said House shall in like Manner chuse the President. But in chusing the President, the Votes shall be taken by States, the Representation from each State having one Vote; A quorum for this Purpose shall consist of a Member or Members from two thirds of the States, and a Majority of all the States shall be necessary to a Choice. In every Case, after the Choice of the President, the Person having the greatest Number of Votes of the Electors shall be the Vice President. But if there should remain two or more who have equal Votes, the Senate should chuse from them by Ballot the Vice President.]

Congress may determine time of choosing electors and day for casting their votes.—3. The Congress may determine the Time of chusing the Electors, and the Day on which they shall give their Votes; which Day shall be the same throughout the United States.

**Qualifications for the office of President.†**—4. No Person except a natural born Citizen, or a Citizen of the United States, at the time of the Adoption of this Constitution, shall be eligible to the Office of President; neither shall any Person be eligible to that Office who shall not have attained to the Age of thirty five Years, and been fourteen Years a Resident within the United States.

**Filling vacancy in the office of Presi-**

**dent.‡**—5. In Case of the Removal of the President from Office, or of his Death, Resignation, or Inability to discharge the Powers and Duties of the said Office, the same shall devolve on the Vice President, and the Congress may by Law provide for the Case of Removal, Death, Resignation or Inability, both of the President and Vice President, declaring what Officer shall then act as President, and such Officer shall act accordingly, until the Disability be removed, or a President shall be elected.

**Compensation of the President.—6.** The President shall, at stated Times, receive for his Services, a Compensation, which shall neither be increased nor diminished during the Period for which he shall have been elected, and he shall not receive within that Period any other Emolument from the United States, or any of them.

**Oath to be taken by the President.—7.** Before he enter on the Execution of his Office, he shall take the following Oath or Affirmation:—"I do solemnly swear (or affirm) that I will faithfully execute the Office of President of the United States, and will to the best of my Ability, preserve, protect and defend the Constitution of the United States."

#### Section 2

The President to be commander-in-chief of army and navy and head of executive departments; may grant reprieves and pardons.—1. The President shall be Commander in Chief of the Army and Navy of the United States, and of the Militia of the several States, when called into the actual Service of the United States; he may require the Opinion, in writing, of the principal Officer in each of the executive Departments, upon any subject relating to the Duties of their respective Offices, and he shall have Power to grant Reprieves and Pardons for Offences against the United States, except in Cases of Impeachment.

President may, with concurrence of Senate, make treaties, appoint ambassadors, etc.; appointment of inferior officers, authority of Congress over.—2. He shall have Power, by and with the Advice and Consent of the Senate, to make Treaties, provided two thirds of the Senators present concur; and he shall nominate, and by and with the Advice and Consent of the Senate, shall appoint Ambassadors, other public Ministers and Consuls, Judges of the supreme Court, and all other Officers of the United States, whose Appointments are not herein otherwise provided for, and which shall be established by Law: but the Congress may by Law vest the Appointment of such inferior Officers, as they think proper, in the President alone, in

\* This clause has been superseded by the 12th Amendment.

† For qualifications of the Vice President, see 12th Amendment.

‡ Amended by the 20th Amendment, Sections 3 and 4.



the Courts of Law, or in the Heads of Departments.

President may fill vacancies in office during recess of Senate.—3. The President shall have Power to fill up all Vacancies that may happen during the Recess of the Senate, by granting Commissions which shall expire at the End of their next Session.

#### Section 3

President to give advice to Congress; may convene or adjourn it on certain occasions; to receive ambassadors, etc.; have laws executed and commission all officers.—He shall from time to time give to the Congress Information of the State of the Union, and recommend to their Consideration such Measures as he shall judge necessary and expedient; he may, on extraordinary Occasions, convene both Houses, or either of them, and in Case of Disagreement between them, with Respect to the Time of Adjournment, he may adjourn them to such Time as he shall think proper; he shall receive Ambassadors and other public Ministers; he shall take Care that the Laws be faithfully executed, and shall Commission all the Officers of the United States.

#### Section 4

All civil officers removable by impeachment.—1. The President, Vice President and all civil Officers of the United States, shall be removed from Office on Impeachment for, and Conviction of, Treason, Bribery, or other high Crimes and Misdemeanors.

### ARTICLE III

#### Section 1

Judicial powers; how vested; term of office and compensation of judges.—The judicial Power of the United States, shall be vested in one supreme Court, and in such inferior Courts as the Congress may from time to time ordain and establish. The Judges, both of the supreme and inferior Courts, shall hold their Offices during good Behaviour, and shall, at stated Times, receive for their Services, a Compensation, which shall not be diminished during their Continuance in Office.

#### Section 2

Jurisdiction of Federal courts.\*—1. The judicial Power shall extend to all Cases, in Law and Equity, arising under this Constitution, the Laws of the United States, and Treaties made, or which shall be made, under their Authority;—to all Cases affecting Ambassadors, other public Ministers and Consuls;—to all Cases of Admiralty and maritime Jurisdiction;—to Controversies to which the United States shall be a Party;—to Controversies between two or more States;—between a State and

Citizens of another State;—between Citizens of different States,—between Citizens of the same State claiming Lands under Grants of different States, and between a State, or the Citizens thereof, and foreign States, Citizens or Subjects.

Original and appellate jurisdiction of Supreme Court.—2. In all Cases affecting Ambassadors, other public Ministers and Consuls, and those in which a State shall be Party, the supreme Court shall have original Jurisdiction. In all the other Cases before mentioned, the supreme Court shall have appellate Jurisdiction, both as to Law and Fact, with such Exceptions, and under such Regulations as the Congress shall make.

Trial of all crimes, except impeachment, to be by jury.—3. The Trial of all Crimes, except in Cases of Impeachment, shall be by Jury; and such Trial shall be held in the State where the said Crimes shall have been committed; but when not committed within any State, the Trial shall be at such Place or Places as the Congress may by Law have directed.

#### Section 3

Treason defined; conviction of.—1. Treason against the United States, shall consist only in levying War against them, or, in adhering to their Enemies, giving them Aid and Comfort. No Person shall be convicted of Treason unless on the Testimony of two Witnesses to the same overt Act, or on Confession in open Court.

Congress to declare punishment for treason; proviso.—2. The Congress shall have power to declare the Punishment of Treason, but no Attainder of Treason shall work Corruption of Blood, or Forfeiture except during the Life of the Person attainted.

### ARTICLE IV

#### Section 1

Each State to give full faith and credit to the public acts and records of other States.—Full Faith and Credit shall be given in each State to the public Acts, Records, and judicial Proceedings of every other State. And the Congress may by general Laws prescribe the Manner in which such Acts, Records and Proceedings shall be proved, and the Effect thereof.

#### Section 2

Privileges of citizens.—1. The Citizens of each State shall be entitled to all Privileges and Immunities of Citizens in the several States.

Extradition between the several States.—2. A Person charged in any State with Treason, Felony, or other Crime, who shall flee from Justice, and be found in another State, shall on Demand of the executive

\* This section is abridged by the 11th Amendment.



Authority of the State from which he fled, be delivered up, to be removed to the State having Jurisdiction of the Crime.

Persons held to labor or service in one State, fleeing to another, to be returned.\*

—3. No Person held to Service or Labour in one State, under the Laws thereof, escaping into another, shall, in Consequence of any Law or Regulation therein, be discharged from such Service or Labour, but shall be delivered up on Claim of the Party to whom such Service or Labour may be due.

### Section 3

New States.—1. New States may be admitted by the Congress into this Union; but no new State shall be formed or erected within the Jurisdiction of any other State; nor any State be formed by the Junction of two or more States, or Parts of States, without the Consent of the Legislatures of the States concerned as well as of the Congress.

Regulations concerning territory.—2. The Congress shall have Power to dispose of and make all needful Rules and Regulations respecting the Territory or other Property belonging to the United States; and nothing in this Constitution shall be so construed as to Prejudice any Claims of the United States, or of any particular State.

### Section 4

Republican form of government and protection guaranteed the several States.—The United States shall guarantee to every State in this Union a Republican Form of Government, and shall protect each of them against Invasion; and on Application of the Legislature, or of the Executive (when the Legislature cannot be convened) against domestic Violence.

## ARTICLE V

Ways in which the Constitution can be amended.—The Congress, whenever two thirds of both Houses shall deem it necessary, shall propose Amendments to this Constitution, or, on the Application of the Legislatures of two thirds of the several States, shall call a Convention for proposing Amendments, which, in either Case, shall be valid to all Intents and Purposes, as Part of this Constitution, when ratified by the Legislatures of three fourths of the several States, or by Conventions in three fourths thereof, as the one or the other Mode of Ratification may be proposed by the Congress; Provided that no Amendment which may be made prior to the Year One thousand eight hundred and eight shall in any Manner affect the first and fourth Clauses in the Ninth Section of the first Article; and that no State, without its Consent, shall be deprived of its equal Suffrage in the Senate.

## ARTICLE VI

Debts contracted under the confederation secured.—1. All Debts contracted and Engagements entered into, before the Adoption of this Constitution, shall be as valid against the United States under this Constitution, as under the Confederation.

Constitution, laws and treaties of the United States to be supreme.—2. This Constitution, and the Laws of the United States which shall be made in Pursuance thereof; and all Treaties made, or which shall be made, under the Authority of the United States, shall be the supreme Law of the Land; and the Judges in every State shall be bound thereby, any Thing in the Constitution or Laws of any State to the Contrary notwithstanding.

Who shall take constitutional oath; no religious test as to official qualification.—3. The Senators and Representatives before mentioned, and the Members of the several State Legislatures, and all executive and judicial Officers, both of the United States and of the several States, shall be bound by Oath or Affirmation, to support this Constitution; but no religious Test shall ever be required as a Qualification to any Office or public Trust under the United States.

## ARTICLE VII

Constitution to be considered adopted when ratified by nine States.—The Ratification of the Conventions of nine States shall be sufficient for the Establishment of this Constitution between the States so ratifying the Same.

Done in Convention by the Unanimous Consent of the States present the Seventeenth Day of September in the Year of our Lord one thousand seven hundred and Eighty seven and of the Independence of the United States of America the Twelfth. In witness whereof We have hereunto subscribed our Names.

Go. WASHINGTON

*Preside and Deputy from Virginia*

### NEW HAMPSHIRE

John Langdon Nicholas Gilman

### MASSACHUSETTS

Nathaniel Gorham Rufus King

### CONNECTICUT

Wm Saml Johnson Roger Sherman

### NEW YORK

Alexander Hamilton

### NEW JERSEY

Wm. Livingston Wm Paterson  
David Brearley Jona. Dayton

### PENNSYLVANIA

B Franklin Thomas Mifflin  
Robt Morris Geo. Clymer  
Thos FitzSimons Jared Ingersoll  
James Wilson Gouv Morris

### DELAWARE

Geo. Read Gunning Bedford Jun  
John Dickinson Richard Bassett  
Jaco. Broom

### MARYLAND

James McHenry Dan of St Thos Jenifer  
Dani Carroll

\* See the 13th Amendment.

## VIRGINIA

John Blair —

James Madison Jr.

## NORTH CAROLINA

Wm Blount  
Hu Williamson

Richd Dobbs Spaight

## SOUTH CAROLINA

J. Rutledge  
Charles PinckneyCharles Cotesworth Pinckney.  
Pierce Butler

## GEORGIA

William Few  
Abr Baldwin  
Attest: William Jackson, Secretary.

## AMENDMENTS TO THE CONSTITUTION OF THE UNITED STATES

(Amendments I to X inclusive, popularly known as the Bill of Rights, were proposed and sent to the states by the first session of the First Congress. They became effective Dec. 15, 1791.)

## ARTICLE I

Freedom of religion, speech, of the press, and right of petition.—Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press; or the right of the people peaceably to assemble, and to petition the Government for a redress of grievances.

## ARTICLE II

Right of people to bear arms not to be infringed.—A well regulated Militia, being necessary to the security of a free State, the right of the people to keep and bear Arms, shall not be infringed.

## ARTICLE III

Quartering of troops.—No Soldier shall, in time of peace be quartered in any house, without the consent of the Owner, nor in time of war, but in a manner to be prescribed by law.

## ARTICLE IV

Persons and houses to be secure from unreasonable searches and seizures.—The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no Warrants shall issue, but upon probable cause, supported by Oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized.

## ARTICLE V

Trials for crimes; just compensation for private property taken for public use.—No person shall be held to answer for a capital, or otherwise infamous crime, unless on a presentment or indictment of a Grand Jury, except in cases arising in the land or naval forces, or in the Militia, when in actual service in time of War or public danger; nor shall any person be subject for the same offence to be twice put in jeopardy of life or limb; nor shall be compelled in any criminal case to be a witness against himself, nor be deprived of life, liberty, or property, without due process of law; nor shall private property be taken for public use, without just compensation.

## ARTICLE VI

Civil rights in trials for crimes enumerated.—In all criminal prosecutions, the accused shall enjoy the right to a speedy and public trial, by an impartial jury of the State and district wherein the crime shall have been committed, which district shall have been previously ascertained by law, and to be informed of the nature and cause of the accusation; to be confronted with the witnesses against him; to have compulsory process for obtaining witnesses in his favor, and to have the Assistance of Counsel for his defence.

## ARTICLE VII

Civil rights in civil suits.—In Suits at common law, where the value in controversy shall exceed twenty dollars, the right of trial by jury shall be preserved, and no fact tried by a jury, shall be otherwise re-examined in any Court of the United States, than according to the rules of the common law.

## ARTICLE VIII

Excessive bail, fines and punishments prohibited.—Excessive bail shall not be required, nor excessive fines imposed, nor cruel and unusual punishments inflicted.

## ARTICLE IX

Reserved rights of people.—The enumeration in the Constitution, of certain rights, shall not be construed to deny or disparage others retained by the people.

## ARTICLE X

Powers not delegated, reserved to states and people respectively.—The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people.

## ARTICLE XI

(The proposed amendment was sent to the states Mar. 5, 1794, by the Third Congress. It became effective Jan. 8, 1798.)

Judicial power of United States not to extend to suits against a State.—The Judicial power of the United States shall not be construed to extend to any suit in law or equity, commenced or prosecuted against one of the United States by Citizens of another State, or by Citizens or Subjects of any Foreign State.



## ARTICLE XII

(The proposed amendment was sent to the states Dec. 12, 1803, by the Eighth Congress. It became effective Sept. 25, 1804.)

Present mode of electing President and Vice-President by electors.\*—The Electors shall meet in their respective states, and vote by ballot for President and Vice-President, one of whom, at least, shall not be an inhabitant of the same state with themselves; they shall name in their ballots the person voted for as President, and in distinct ballots the person voted for as Vice-President, and they shall make distinct lists of all persons voted for as President, and of all persons voted for as Vice-President, and of the number of votes for each, which lists they shall sign and certify, and transmit sealed to the seat of the government of the United States, directed to the President of the Senate;—The President of the Senate shall, in the presence of the Senate and House of Representatives, open all the certificates and the votes shall then be counted;—The person having the greatest number of votes for President, shall be the President, if such number be a majority of the whole number of Electors appointed; and if no person have such majority, then from the persons having the highest numbers not exceeding three on the list of those voted for as President, the House of Representatives shall choose immediately, by ballot, the President. But in choosing the President, the votes shall be taken by states, the representation from each State having one vote; a quorum for this purpose shall consist of a member or members from two-thirds of the states, and a majority of all the states shall be necessary to a choice. And if the House of Representatives shall not choose a President whenever the right of choice shall devolve upon them, before the fourth day of March next following, then the Vice-President shall act as President, as in the case of the death or other constitutional disability of the President.—The person having the greatest number of votes as Vice-President, shall be the Vice-President, if such number be a majority of the whole number of Electors appointed, and if no person have a majority, then from the two highest numbers on the list, the Senate shall choose the Vice-President; a quorum for the purpose shall consist of two-thirds of the whole number of Senators, and a majority of the whole number shall be necessary to a choice. But no person constitutionally ineligible to the office of President shall be eligible to that of Vice-President of the United States.

## ARTICLE XIII

(The proposed amendment was sent to the states Feb. 1, 1865, by the Thirty-eighth Congress. It became effective Dec. 18, 1865.)

## Section 1

Slavery prohibited.—Neither slavery nor

involuntary servitude, except as a punishment for crime whereof the party shall have been duly convicted, shall exist within the United States, or any place subject to their jurisdiction.

## Section 2

Congress given power to enforce this article.—Congress shall have power to enforce this article by appropriate legislation.

## ARTICLE XIV

(The proposed amendment was sent to the states June 16, 1868, by the Thirty-ninth Congress. It became effective July 28, 1868.)

## Section 1

Citizenship defined; privileges of citizens.—All persons born or naturalized in the United States, and subject to the jurisdiction thereof, are citizens of the United States and of the State wherein they reside. No State shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States; nor shall any State deprive any person of life, liberty, or property, without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws.

## Section 2

Apportionment of Representatives.—Representatives shall be apportioned among the several States according to their respective numbers, counting the whole number of persons in each State, excluding Indians not taxed. But when the right to vote at any election for the choice of electors for President and Vice-President of the United States, Representatives in Congress, the Executive and Judicial officers of a State, or the members of the Legislature thereof, is denied to any of the male inhabitants of such State, being twenty-one years of age, and citizens of the United States, or in any way abridged, except for participation in rebellion, or other crime, the basis of representation therein shall be reduced in the proportion which the number of such male citizens shall bear to the whole number of male citizens twenty-one years of age in such State.

## Section 3

Disqualification for office; removal of disability.—No person shall be a Senator or Representative in Congress, or elector of President and Vice President, or hold any office, civil or military, under the United States, or under any State, who, having previously taken an oath, as a member of Congress, or as an officer of the United States, or as a member of any State legislature, or as an executive or judicial officer of any State, to support the Constitution of the United States, shall

\* Amended by the 20th Amendment, Sections 3 and 4.



have engaged in insurrection or rebellion against the same, or given aid or comfort to the enemies thereof. But Congress may by a vote of two-thirds of each House, remove such disability.

#### Section 4

Public debt not to be questioned; payment of debts and claims incurred in aid of rebellion forbidden.—The validity of the public debt of the United States, authorized by law, including debts incurred for payment of pensions and bounties for services in suppressing insurrection or rebellion, shall not be questioned. But neither the United States nor any State shall assume or pay any debt or obligation incurred in aid of insurrection or rebellion against the United States, or any claim for the loss or emancipation of any slave; but all such debts, obligations and claims shall be held illegal and void.

#### Section 5

Congress given power to enforce this article.—The Congress shall have power to enforce, by appropriate legislation, the provisions of this article.

### ARTICLE XV

(The proposed amendment was sent to the states Feb. 27, 1869, by the Fortieth Congress. It became effective Mar. 30, 1870.)

#### Section 1

Right of certain citizens to vote established.—The right of citizens of the United States to vote shall not be denied or abridged by the United States or by any State on account of race, color, or previous condition of servitude.

#### Section 2

Congress given power to enforce this article.—The Congress shall have power to enforce this article by appropriate legislation.

### ARTICLE XVI

(The proposed amendment was sent to the states May 12, 1909, by the Sixty-first Congress. It became effective Feb. 25, 1913.)

Taxes on income; Congress given power to lay and collect.—The Congress shall have power to lay and collect taxes on incomes, from whatever source derived, without apportionment among the several States, and without regard to any census or enumeration.

### ARTICLE XVII

(The proposed amendment was sent to the states May 16, 1912, by the Sixty-second Congress. It became effective May 31, 1913.)

Election of United States Senators; filling of vacancies; qualifications of electors.

1. The Senate of the United States shall be composed of two Senators from each State, elected by the people thereof, for

six years; and each Senator shall have one vote. The electors in each State shall have the qualifications requisite for electors of the most numerous branch of the State legislatures.

2. When vacancies happen in the representation of any State in the Senate, the executive authority of such State shall issue writs of election to fill such vacancies: *Provided*, That the legislature of any State may empower the executive thereof to make temporary appointment until the people fill the vacancies by election as the legislature may direct.

3. This amendment shall not be so construed as to affect the election or term of any Senator chosen before it becomes valid as part of the Constitution.

### ARTICLE XVIII\*

(The proposed amendment was sent to the states Dec. 18, 1917, by the Sixty-fifth Congress. It was approved by three-quarters of the states by Jan. 16, 1919, and became effective Jan. 16, 1920.)

Manufacture, sale or transportation of intoxicating liquors, for beverage purposes, prohibited.—1. After one year from the ratification of this article the manufacture, sale, or transportation of intoxicating liquors within, the importation thereof into, or the exportation thereof from the United States and all territory subject to the jurisdiction thereof for beverage purposes is hereby prohibited.

Congress and the several States given concurrent power to pass appropriate legislation to enforce this article.—2. The Congress and the several States shall have concurrent power to enforce this article by appropriate legislation.

Provisions of article to become operative, when adopted by three-fourths of the States.—3. This article shall be inoperative unless it shall have been ratified as an amendment to the Constitution by the legislatures of the several States, as provided in the Constitution, within seven years from the date of the submission hereof to the States by Congress.

### ARTICLE XIX

(The proposed amendment was sent to the states June 4, 1919, by the Sixty-sixth Congress. It became effective Aug. 26, 1920.)

The right of citizens to vote shall not be denied because of sex.—The right of citizens of the United States to vote shall not be denied or abridged by the United States or by any States on account of sex.

Congress shall have power to enforce this article by appropriate legislation.

### ARTICLE XX

(The proposed amendment, sometimes called the "Lame Duck Amendment," was sent to the states Mar. 3, 1932, by the Seventy-second Congress. It became effective Feb. 6, 1933; but, in accordance with Section 5, Sections 1 and 2 did not go into effect until Oct. 15, 1933.)

\* Repealed by the 21st Amendment.

## Section 1

**Terms of President, Vice-President, Senators and Representatives.**—The terms of the President and Vice-President shall end at noon on the twentieth day of January, and the terms of Senators and Representatives at noon on the third day of January, of the years in which such terms would have ended if this article had not been ratified; and the terms of their successors shall then begin.

## Section 2

**Time of assembling Congress.**—The Congress shall assemble at least once in every year, and such meeting shall begin at noon on the third day of January, unless they shall by law appoint a different day.

## Section 3

**Filling vacancy in office of President.**—If, at the time fixed for the beginning of the term of the President, the President-elect shall have died, the Vice-President-elect shall become President. If a President shall not have been chosen before the time fixed for the beginning of his term, or if the President-elect shall have failed to qualify, then the Vice-President-elect shall act as President until a President shall have qualified; and the Congress may by law provide for the case wherein neither a President-elect nor a Vice-President-elect shall have qualified, declaring who shall then act as President, or the manner in which one who is to act shall be selected, and such person shall act accordingly until a President or Vice-President shall have qualified.

## Section 4

**Power of Congress in Presidential succession.**—The Congress may by law provide for the case of the death of any of the persons from whom the House of Representatives may choose a President whenever the right of choice shall have devolved upon them, and for the case of the death of any of the persons from whom the Senate may choose a Vice-President whenever the right of choice shall have devolved upon them.

## Section 5

**Time of taking effect.**—Sections 1 and 2 shall take effect on the 15th day of October following the ratification of this article.

## Section 6

**Ratification.**—This article shall be inoperative unless it shall have been ratified as an amendment to the Constitution by the legislatures of three-fourths of the

several States within seven years from the date of its submission.

## ARTICLE XXI

(The proposed amendment was sent to the states Feb. 20, 1933, by the Seventy-second Congress. It became effective Dec. 6, 1933.)

## Section 1

**Repeal of Prohibition Amendment.**—The eighteenth article of amendment to the Constitution of the United States is hereby repealed.

## Section 2

**Transportation of intoxicating liquors.**—The transportation or importation into any State, Territory, or possession of the United States for delivery or use therein of intoxicating liquors, in violation of the laws thereof, is hereby prohibited.

## Section 3

**Ratification.**—This article shall be inoperative unless it shall have been ratified as an amendment to the Constitution by convention in the several States, as provided in the Constitution, within seven years from the date of the submission thereof to the States by the Congress.

## ARTICLE XXII

(The proposed amendment was sent to the states Mar. 21, 1947, by the Eightieth Congress. It became effective Feb. 26, 1951.)

## Section 1

**Limit to number of terms a President may serve.**—No person shall be elected to the office of the President more than twice, and no person who has held the office of President, or acted as President, for more than two years of a term to which some other person was elected President shall be elected to the office of the President more than once. But this Article shall not apply to any person holding the office of President when this Article was proposed by the Congress, and shall not prevent any person who may be holding the office of President, or acting as President, during the term within which this Article becomes operative from holding the office of President or acting as President during the remainder of such term.

## Section 2

**Ratification.**—This article shall be inoperative unless it shall have been ratified as an amendment to the Constitution by the legislatures of three-fourths of the several States within seven years from the date of its submission to the States by the Congress.

Lincoln's Gettysburg Address

The Battle of Gettysburg, one of the most noted battles of the Civil War, was fought on July 1, 2, and 3, 1863. On November 19, 1863, the field was dedicated as a national cemetery by President Lincoln in a two-minute speech that was to become immortal. At the time of its de-

livery the speech was relegated to the inside pages of the papers, while a two-hour address by Edward Everett, the leading orator of the time, caught the headlines. The following is the text of the address revised by President Lincoln from his own notes:

FOURSCORE and seven years ago our fathers brought forth on this continent a new nation conceived in liberty and dedicated to the proposition that all men are created equal. Now we are engaged in a great civil war testing whether that nation, or any nation so conceived and so dedicated, can long endure. We are met on a great battlefield of that war. We have come to dedicate a portion of that field as a final resting-place for those who here gave their lives that that nation might live. It is altogether fitting and proper that we should do this. But, in a larger sense, we cannot dedicate, we cannot consecrate, we cannot hallow this ground. The brave men, living and dead, who struggled here have consecrated it far above our poor power to add or detract. The world will little note nor long remember what we say here, but it can never forget what they did here. It is for us the living rather to be dedicated here to the unfinished work which they who fought here have thus far so nobly advanced. It is rather for us to be here dedicated to the great task remaining before us—that from these honored dead we take increased devotion to that cause for which they gave the last full measure of devotion—that we here highly resolve that these dead shall not have died in vain, that this nation under God shall have a new birth of freedom, and that government of the people, by the people, for the people shall not perish from the earth.

The Monroe Doctrine

The Monroe Doctrine was announced in President James Monroe's message to Congress, during his second term on December 2, 1823 in part as follows:

"In the discussions to which this interest has given rise, and in the arrangements by which they may terminate, the occasion has been deemed proper for asserting as a principle in which rights and interests of the United States are involved, that the American continents, by the free and independent condition which they have assumed and maintain, are henceforth not to be considered as subjects for future colonization by any European power. . . . We owe it, therefore, to candor and to the amicable relations existing between the United States and those powers to declare that we should consider any attempt on their part to extend their system to any portion of this hemisphere as dangerous to our peace and safety. With the existing colonies or dependencies of any European power we have not interfered and shall not interfere. But with the governments who have declared their independence and maintain it, and whose independence we have, on great consideration and on just principles, acknowledged, we could not view any interposition for the purpose of oppressing them or controlling in any other manner their destiny by any European power in any other light than as the manifestation of an unfriendly disposition toward the United States."

Minority Presidents

Thirteen candidates have become President of the U. S. with a popular vote less than 50 per cent of the total vote cast. It should be noted, however, that in elections before 1872, presidential electors were not chosen by popular vote in all states. Adams' election in 1824 was by the House of Representatives, which chose him over Jackson, who had a plurality of both electoral and popular votes, but not a majority in the electoral college.

Besides Jackson in 1824, only two other candidates receiving the largest popular vote have failed to gain a majority in the electoral college—Samuel J. Tilden (D) in 1876 and Grover Cleveland (D) in 1888.

The "minority" Presidents follow:

Year	President	Elec- toral	Popular vote
		Pct.	Pct.
1824	John Q. Adams.....	31.8	29.8
1844	James K. Polk (D).....	61.8	49.3
1848	Zachary Taylor (W).....	56.2	47.3
1856	James A. Buchanan (D).....	58.7	45.3
1860	Abraham Lincoln (R).....	59.4	39.9
1876	Rutherford B. Hayes (R).....	50.1	47.9
1880	James A. Garfield (R).....	57.9	48.3
1884	Grover Cleveland (D).....	54.6	48.8
1888	Benjamin Harrison (R).....	58.1	47.8
1892	Grover Cleveland (D).....	62.4	46.0
1912	Woodrow Wilson (D).....	81.9	41.8
1916	Woodrow Wilson (D).....	52.1	49.3
1948	Harry S. Truman (D).....	57.1	49.5



## The Mayflower Compact

On September 6, 1620, the *Mayflower*, a sailing vessel of about 180 tons, started her memorable voyage from Plymouth, England with 100 or 102\* pilgrims aboard, bound for Virginia to establish a private permanent colony in North America. Arriving at Provincetown, Mass., on November 11 (November 21, new style calendar),

forty-one of the passengers signed the famous "Mayflower Compact" as the boat lay at anchor in that Cape Cod harbor. A small detail of the pilgrims, led by William Bradford, assigned to select a place for permanent settlement landed at what is now Plymouth, Mass., on December 21, N.S.

The text of the compact follows:

**I**N THE NAME OF GOD, Amen. We, whose names are underwritten, the Loyal Subjects of our dread Sovereign Lord, King *James*, by the Grace of God, of Great Britain, France and Ireland, King, Defender of the Faith, &

Having undertaken for the Glory of God, and Advancement of the Christian Faith, and the Honour of our King and Country, a voyage to plant the first colony in the northern Parts of Virginia; do by these Presents, solemnly and mutually in the Presence of God and one of another, covenant and combine ourselves together into a civil Body Politick, for our better Ordering and Preservation, and Furtherance of the Ends aforesaid; And by Virtue hereof to enact, constitute, and frame, such just and equal Laws, Ordinances, Acts, Constitutions and Offices, from time to time, as shall be thought most meet and convenient for the General good of the Colony; unto which we promise all due Submission and Obedience.

In WITNESS whereof we have hereunto subscribed our names at *Cape Cod* the eleventh of *November*, in the Reign of our Sovereign Lord, King *James* of England, France and Ireland, the eighteenth, and of Scotland the fifty-fourth. Anno Domini, 1620

John Carver  
Digery Priest  
William Brewster  
Edmund Margesson  
John Alden  
George Soule  
James Chilton  
Francis Cooke  
Josias Fletcher  
John Ridgate  
Christopher Martin

William Mullins  
Thomas English  
John Howland  
Stephen Hopkins  
Edward Winslow  
Gilbert Winslow  
Miles Standish  
Richard Bitteridge  
Francis Eaton  
John Tilly  
John Billington

Thomas Tinker  
Samuel Fuller  
Richard Clark  
John Allerton  
Richard Warren  
Edward Liester  
William Bradford  
Thomas Williams  
Isaac Allerton  
Peter Brown  
John Turner

Edward Tilly  
John Craxton  
Thomas Rogers  
John Goodman  
Edward Fuller  
Richard Gardner  
William White  
Edward Doten

\* Historians differ as to whether 100, 101, or 102 passengers were aboard

## The Early Congresses

At the urging of Massachusetts and Virginia, the First Continental Congress met in Philadelphia on September 5, 1774, and was attended by representatives of all the colonies except Georgia. Patrick Henry of Virginia declared: "The distinctions between Pennsylvanians, New Yorkers and New Englanders are no more. I am not a Virginian but an American." This Congress, which adjourned October 26, 1774, passed intercolonial resolutions calling for extensive boycott by the colonies against British trade.

The following year, most of the delegates from the colonies were chosen by popular election to attend the Second Continental Congress, which assembled in Philadelphia on May 10. As war had already begun between the colonies and England, the chief problems before the Congress were the procuring of military supplies, the establishment of an army and proper defenses, the issuing of continental bills of credit, etc. On June 15, 1775, George Washington

was elected to command the Continental army. Congress adjourned Dec. 12, 1776.

Other Continental Congresses were held in Baltimore (1776-77), Philadelphia (1777), Lancaster, Pa. (1777), York, Pa. (1777-78) and Philadelphia (1778-81).

In 1781, the Articles of Confederation, although establishing a league of the thirteen states rather than a strong central government, provided for the continuance of Congress. Known thereafter as the Congress of the Confederation, it held sessions in Philadelphia (1781-83), Princeton, N. J. (1783), Annapolis, Md. (1783-84) and Trenton, N. J. (1784). Five sessions were held in New York City between the years 1785 and 1789.

The Congress of the United States, established by the ratification of the Constitution, held its first meeting on Mar. 4, 1789, in N. Y. C. Several sessions of Congress were held in Philadelphia, and the first meeting in Washington D. C., was on Nov. 17, 1800.

## Presidents of the Continental Congresses

Name	Elected	Born	Died
Peyton Randolph, Va. ....	Sept. 5, 1774	c.1721	1775
Henry Middleton, S. C. ....	Oct. 22, 1774	1717	1784
Peyton Randolph, Va. ....	May 10, 1775	c.1721	1775
John Hancock, Mass. ....	May 24, 1775	1737	1793
Henry Laurens, S. C. ....	Nov. 1, 1777	1724	1792
John Jay, N. Y. ....	Dec. 10, 1778	1745	1829
Samuel Huntington, Conn. ....	Sept. 28, 1779	1731	1796
Thomas McKean, Del. ....	July 10, 1781	1734	1817
John Hanson, Md. ....	Nov. 5, 1781	1715	1783
Elias Boudinot, N. J. ....	Nov. 4, 1782	1740	1821
Thomas Mifflin, Pa. ....	Nov. 3, 1783	1744	1800
Richard Henry Lee, Va. ....	Nov. 30, 1784	1732	1794
John Hancock, Mass.* ....	Nov. 23, 1785	1737	1793
Nathaniel Gorham, Mass. ....	June 6, 1786	1738	1796
Arthur St. Clair, Pa. ....	Feb. 2, 1787	1734	1818
Cyrus Griffin, Va. ....	Jan. 22, 1788	1748	1810

\* Resigned May 29, 1786, never having served, because of continued illness.

## The Star-Spangled Banner

Francis Scott Key, 1814

O say, can you see, by the dawn's early light,  
 What so proudly we hail'd at the twilight's last gleaming?  
 Whose broad stripes and bright stars, thro' the perilous fight,  
 O'er the ramparts we watch'd, were so gallantly streaming?  
 And the rockets' red glare, the bombs bursting in air,  
 Gave proof thro' the night that our flag was still there.  
 O say, does that star-spangled banner yet wave  
 O'er the land of the free and the home of the brave?

On the shore dimly seen thro' the mists of the deep,  
 Where the foe's haughty host in dread silence reposes,  
 What is that which the breeze, o'er the towering steep,  
 As it fitfully blows, half conceals, half discloses?  
 Now it catches the gleam of the morning's first beam,  
 In full glory reflected, now shines on the stream:  
 'T is the star-spangled banner: O, long may it wave  
 O'er the land of the free and the home of the brave!

And where is that band who so vauntingly swore  
 That the havoc of war and the battle's confusion,  
 A home and a country should leave us no more?  
 Their blood has wash'd out their foul footsteps' pollution.  
 No refuge could save the hireling and slave  
 From the terror of flight or the gloom of the grave:  
 And the star-spangled banner in triumph doth wave  
 O'er the land of the free and the home of the brave.

O thus be it ever when free-men shall stand  
 Between their lov'd home and the war's desolation;  
 Blest with vict'ry and peace, may the heav'n-rescued land  
 Praise the Pow'r that hath made and preserv'd us a nation!  
 Then conquer we must, when our cause it is just,  
 And this be our motto: "In God is our trust!"  
 And the star-spangled banner in triumph shall wave  
 O'er the land of the free and the home of the brave!

ON SEPTEMBER 13, 1814, Francis Scott Key visited the British fleet in Chesapeake Bay to secure the release of Dr. William Beanes, who had been captured after the burning of Washington, D. C. The release was secured, but Key was detained on ship overnight during the shelling of Fort McHenry, one of the forts defending Baltimore. In the morning, he was so delighted to see the American flag still flying over the fort that he began a poem to commemorate the occasion. Entitled "The Star-Spangled Banner," the poem soon attained wide popularity as sung to the tune "Anacreon in Heaven." The origin of this tune is obscure, but it may have been written by John Stafford Smith, a British composer born in 1750. "The Star-Spangled Banner" was officially made the National Anthem by Congress in 1931, although already adopted as such by the Army and Navy.

## History of the Flag

*Source: Encyclopædia Britannica.*

**T**HE FIRST OFFICIAL AMERICAN flag, the Continental or Grand Union flag, was displayed on Prospect Hill, Jan. 1, 1776, in the American lines besieging Boston. It had thirteen alternate red and white stripes, with the British Union Jack in the upper left corner.

On June 14, 1777, the Continental Congress adopted the design for a new flag, which actually was the Continental flag with the red cross of St. George and the white cross of St. Andrew replaced on the blue field by thirteen stars, one for each state. No rule was made as to the arrangement of the stars, and while they were usually shown in a circle, there were various other designs. It is uncertain when the new flag was first flown, but its first official announcement is believed to have been on Sept. 3, 1777.

The first public assertion that Betsy Ross made the first Stars and Stripes appeared in a paper read before the Historical Society of Pennsylvania on March 14, 1870, by William J. Canby, a grandson. However, Mr. Canby on later investigation found no official documents of any action by Congress on the flag before June 14, 1777. Betsy Ross' own story, according to her daughter, was that Washington, Robert Morris and George Ross, as representatives of Congress, visited her in Philadelphia in June, 1776, showing her a rough draft of the flag and asking her if she could make one. However, the only actual record of the manufacture of flags by Betsy Ross is a voucher in Harrisburg, Pa., for 14 pounds

and some shillings for flags for the Pennsylvania navy.

On Jan. 13, 1794, Congress voted to add two stars and two stripes to the flag in recognition of the admission of Vermont and Kentucky to the Union. By 1818, there were twenty states in the Union, and as it was obvious that the flag would soon become unwieldy, Congress voted April 18 to return to the original thirteen stripes and to indicate the admission of a new state simply by the addition of a star the following July 4. The last two stars were added July 4, 1912, for New Mexico and Arizona.

The first Confederate flag, adopted in 1861 by the Confederate convention in Montgomery, Ala., was called the Stars and Bars; but because of its similarity in colors to the American flag, there was much confusion in the Battle of Bull Run. To remedy this situation, Gen. G. T. Beauregard suggested a battle flag, which was used by the Southern armies throughout the war. The flag consisted of a red field on which was placed a blue cross of St. Andrew separated from the field by a white fillet and adorned with thirteen\* white stars for the Confederate states. In May, 1863, at Richmond, an official flag was adopted by the Confederate Congress. This flag was white and twice as long as wide; the union, two-thirds the width of the flag, contained the battle flag designed for Gen. Beauregard. A broad transverse stripe of red was added Feb. 4, 1865, so that the flag might not be mistaken for a signal of truce.

\* 11 states formally seceded, and unofficial groups in Kentucky and Missouri adopted ordinances of secession. On this basis, these two states were admitted to the Confederacy, although the official state governments remained in the Union.

## Flag Etiquette

(Public Law 829—77th Congress)

### JOINT RESOLUTION

To amend Public Law Numbered 623, approved June 22, 1942, entitled "Joint resolution to codify and emphasize existing rules and customs pertaining to the display and use of the flag of the United States of America."

*Resolved by the Senate and House of Representatives of the United States of America in Congress Assembled, That Public Law Numbered 623, approved June 22, 1942, entitled "Joint resolution to codify and emphasize existing rules and customs pertaining to the display and use of the flag of the United States of America," be, and the same is hereby amended to read as follows:*

That the following codification of existing rules and customs pertaining to the display and use of the flag of the United States of America be, and it is hereby established for the use of such civilians or civilian groups or organizations as may

not be required to conform with regulations promulgated by one or more executive departments of the Government of the United States.

SEC. 2. (a) It is the universal custom to display the flag only from sunrise to sunset on buildings and on stationary flag-staffs in the open. However, the flag may be displayed at night upon special occasions when it is desired to produce a patriotic effect.

(b) The flag should be hoisted briskly and lowered ceremoniously.

(c) The flag should not be displayed on days when the weather is inclement.

(d) The flag should be displayed on all days when the weather permits, especially on New Year's Day, January 1; Inauguration Day, January 20; Lincoln's Birthday, February 12; Washington's Birthday, Feb-



ruary 22; Army Day\*, April 6; Easter Sunday (variable); Mother's Day, second Sunday in May; Memorial Day (half-staff until noon), May 30; Flag Day, June 14; Independence Day, July 4; Labor Day, first Monday in September; Constitution Day, September 17; Columbus Day, October 12; Navy Day\*, October 27; Armistice Day, November 11†; Thanksgiving Day, fourth Thursday in November; Christmas Day, December 25; such other days as may be proclaimed by the President of the United States; the birthdays of States (dates of admission); and on State holidays.

(e) The flag should be displayed daily, weather permitting, on or near the main administration building of every public institution.

(f) The flag should be displayed in or near every polling place on election days.

(g) The flag should be displayed during school days in or near every schoolhouse.

SEC. 3. That the flag, when carried in a procession with another flag or flags, should be either on the marching right; that is, the flag's own right, or, if there is a line of other flags, in front of the center of that line.

(a) The flag should not be displayed on a float in a parade except from a staff, or as provided in subsection (i).

(b) The flag should not be draped over the hood, top, sides, or back of a vehicle or of a railroad train or a boat. When the flag is displayed on a motorcar, the staff shall be fixed firmly to the chassis or clamped to the radiator cap.

(c) No other flag or pennant should be placed above or, if on the same level, to the right of the flag of the United States of America, except during church services conducted by naval chaplains at sea, when the church pennant may be flown above the flag during church services for the personnel of the Navy.

(d) The flag of the United States of America, when it is displayed with another flag against a wall from crossed staffs, should be on the right, the flag's own right, and its staff should be in front of the staff of the other flag.

(e) The flag of the United States of America should be at the center and at the highest point of the group when a number of flags of States or localities or pennants of societies are grouped and displayed from staffs.

(f) When flags of States, cities, or localities, or pennants of societies are flown on the same halyard with the flag of the United States, the latter should always be at the peak. When the flags are flown from adjacent staffs, the flag of the United States should be hoisted first and lowered last. No such flag or pennant may be placed

above the flag of the United States or to the right of the flag of the United States.

(g) When flags of two or more nations are displayed, they are to be flown from separate staffs of the same height. The flags should be of approximately equal size. International usage forbids the display of the flag of one nation above that of another nation in time of peace.

(h) When the flag of the United States is displayed from a staff projecting horizontally or at an angle from the window sill, balcony, or front of a building, the union of the flag should be placed at the peak of the staff unless the flag is at half-staff. When the flag is suspended over a sidewalk from a rope extending from a house to a pole at the edge of the sidewalk, the flag should be hoisted out, union first, from the building.

(i) When the flag is displayed otherwise than by being flown from a staff, it should be displayed flat, whether indoors or out, or so suspended that its folds fall as free as though the flag were staffed.

(j) When the flag is displayed over the middle of the street, it should be suspended vertically with the union to the north in an east and west street or to the east in a north and south street.

(k) When used on a speaker's platform, the flag, if displayed flat, should be displayed above and behind the speaker. When displayed from a staff in a church or public auditorium, if it is displayed in the chancel of a church, or on the speaker's platform in a public auditorium, the flag should occupy the position of honor and be placed at the clergyman's or speaker's right as he faces the congregation or audience. Any other flag so displayed in the chancel or on the platform should be placed at the clergyman's or speaker's left as he faces the congregation or audience. But when the flag is displayed from a staff in a church or public auditorium elsewhere than in the chancel or on the platform it shall be placed in the position of honor at the right of the congregation or audience as they face the chancel or platform. Any other flag so displayed should be placed on the left of the congregation or audience as they face the chancel or platform.

(l) The flag should form a distinctive feature of the ceremony of unveiling a statue or monument, but it should never be used as the covering for the statue or monument.

(m) The flag, when flown at half-staff, should be first hoisted to the peak for an instant and then lowered to the half-staff position. The flag should be again raised to the peak before it is lowered for the day. By "half-staff" is meant lowering the flag to one-half the distance between the top and bottom of the staff. Crepe streamers may be affixed to spearheads or flag-staffs in a parade only by order of the President of the United States.

\* In 1949, Army Day and Navy Day were abandoned; Armed Forces Day is celebrated the 3rd Saturday of May. † In 1954, changed to Veterans Day.

(n) When the flag is used to cover a casket, it should be so placed that the union is at the head and over the left shoulder. The flag should not be lowered into the grave or allowed to touch the ground.

SEC. 4. That no disrespect should be shown to the flag of the United States of America, the flag should not be dipped to any person or thing. Regimental colors, State flags, and organization or institutional flags are to be dipped as a mark of honor.

(a) The flag should never be displayed with the union down save as a signal of dire distress.

(b) The flag should never touch anything beneath it, such as the ground, the floor, water, or merchandise.

(c) The flag should never be carried flat or horizontally, but always aloft and free.

(d) The flag should never be used as drapery of any sort whatsoever, never festooned, drawn back, nor up, in folds, but always allowed to fall free. Bunting of blue, white, and red, always arranged with the blue above, the white in the middle, and the red below, should be used for covering a speaker's desk, draping the front of a platform, and for decoration in general.

(e) The flag should never be fastened, displayed, used, or stored in such a manner as will permit it to be easily torn, soiled, or damaged in any way.

(f) The flag should never be used as a covering for a ceiling.

(g) The flag should never have placed upon it, nor on any part of it, nor attached to it any mark, insignia, letter, word, figure, design, picture, or drawing of any nature.

(h) The flag should never be used as a receptacle for receiving, holding, carrying, or delivering anything.

(i) The flag should never be used for advertising purposes in any manner whatsoever. It should not be embroidered on such articles as cushions or handkerchiefs and the like, printed or otherwise impressed on paper napkins or boxes or anything that is designed for temporary use and discard; or used as any portion of a costume or athletic uniform. Advertising signs should not be fastened to a staff or halyard from which the flag is flown.

(j) The flag, when it is in such condition that it is no longer a fitting emblem for display, should be destroyed in a dignified way, preferably by burning.

SEC. 5. That during the ceremony of hoisting or lowering the flag or when the flag is passing in a parade or in a review, all persons present should face the flag,

stand at attention, and salute. Those present in uniform should render the military salute. When not in uniform, men should remove the headdress with the right hand holding it at the left shoulder, the hand being over the heart. Men without hats should salute in the same manner. Aliens should stand at attention. Women should salute by placing the right hand over the heart. The salute to the flag in the moving column should be rendered at the moment the flag passes.

SEC. 6. That when the national anthem is played and the flag is not displayed, all present should stand and face toward the music. Those in uniform should salute at the first note of the anthem, retaining this position until the last note. All others should stand at attention, men removing the headdress. When the flag is displayed, all present should face the flag and salute.

SEC. 7. That the pledge of allegiance to the flag, "I pledge allegiance to the flag of the United States of America and to the Republic for which it stands, one Nation, under God,<sup>†</sup> indivisible, with liberty and justice for all," be rendered by standing with the right hand over the heart. However, civilians will always show full respect to the flag when the pledge is given by merely standing at attention, men removing the headdress. Persons in uniform shall render the military salute.

SEC. 8. Any rule or custom pertaining to the display of the flag of the United States of America, set forth herein, may be altered, modified, or repealed, or additional rules with respect thereto may be prescribed, by the Commander-in-Chief of the Army and Navy of the United States, whenever he deems it to be appropriate or desirable; and any such alteration or additional rule shall be set forth in a proclamation.

Approved, December 22, 1942.

### The American's Creed\*

"I believe in the United States of America as a government of the people, by the people, for the people; whose just powers are derived from the consent of the governed; a democracy in a republic; a sovereign Nation of many sovereign States; a perfect union, one and inseparable; established upon those principles of freedom, equality, justice, and humanity for which American patriots sacrificed their lives and fortunes.

"I therefore believe it is my duty to my country to love it; to support its Constitution; to obey its laws; to respect its flag, and to defend it against all enemies."

\* William Tyler Page, Clerk of the United States House of Representatives, wrote "The American's Creed" in 1917. It was accepted by the House of Representatives on behalf of the American people on April 3, 1918.  
<sup>†</sup> Written by Francis Belamy in August, 1892, of the staff of *The Youth's Companion* in Boston, at the suggestion of James B. Upham, one of the editors. <sup>‡</sup> The phrase "under God" was added to the pledge on June 14, 1954.



# THE UNITED NATIONS



## Its Major Cases and Actions

by Marcus Duffield

### IRAN

Iran presented the first case before the Security Council on Jan. 19, 1946, demanding an end to Russian "interference" in Azerbaijan province, which Russia had brought under its control through a puppet government. Iran also demanded that Russia keep her promise to withdraw all occupation troops by Mar. 2. The Council kept the matter on the agenda. Russia withdrew her troops May 6.

### GREECE

On Dec. 3, 1946, Greece complained to the Security Council that Communist-led rebels in northern Greece were being aided by Albania, Bulgaria and Yugoslavia. The Council named an investigating committee, which reported May 23, 1947, that those 3 nations were guilty. A Russian veto of July 29 prevented the Council's acceptance of the report. In Sept. 1948, the U. N. Balkan Commission, which continued to watch developments, again condemned the 3 nations for continuing aid to the Greek rebels. However, 3 months previously, on June 28, 1948, Marshal Tito's Yugoslavia had broken with Moscow. Thereafter, the Greek Communist-led rebellion faded out.

### ATOMIC ENERGY CONTROL

On Dec. 31, 1946, a U. N. commission of 11 nations recommended the "Baruch plan" sponsored by the U. S. for international control and inspection. Only Russia dissented. In June 1947, she submitted a vastly different control plan, limiting international inspection so greatly that the secret making of atomic bombs could not be discovered. On May 17, 1948, the U. N. commission voted (9-2) to suspend work on international atomic control, blaming Russia for the deadlock. A Russian veto of June 22 prevented the Security Council from approving the majority-approved control plan. The topic then went to the General Assembly, which, on Nov. 4, 1948, adopted (40-6) the U. S.-sponsored plan; but nothing could be done to put it into effect because of Soviet-bloc opposition.

### PALESTINE

A General Assembly special session met Apr. 28, 1947, at the request of Great Britain to consider Palestine. An 11-nation investigating committee recommended Aug. 31 that Britain give up control and that an Arab and a Jewish state be established. This partition plan was approved by the

Assembly in Nov. 1947, but proved impossible to enforce.

Britain ceased to govern Palestine on May 14, 1948. Israel proclaimed her independence and was attacked by 5 neighboring Arab nations. The U. N. made 6 appeals to both sides to stop the war; the last brought about a truce from June 11 to July 9. Intermittent fighting took place thereafter. Count Folke Bernadotte, the U. N. mediator, was murdered Sept. 17 near Jerusalem. He was succeeded by Dr. Ralph J. Bunche.

Israel signed an armistice with Egypt on Feb. 24, 1949, and with Jordan on Apr. 3. On May 11, the U. N. voted (37-12) to admit Israel as the 59th member.

### INDONESIA

On July 30, 1947, Australia called the Security Council's attention to the fighting between the Netherlands and the Indonesian Republic. The Council, on Aug. 1, ordered both sides to cease hostilities. A Good Offices Commission was sent to Indonesia, and it effected a truce Jan. 17, 1948. In Dec. 1948, the Dutch attacked Jokjakarta, then the Indonesian capital, and the Council again issued a cease-fire order. Dutch troops were withdrawn from around Jokjakarta in July 1949. Indonesia thereafter peacefully achieved independence from the Netherlands.

### ITALIAN COLONIES

On Sept. 15, 1948, after 3 years of argument, the Big 4 failed to agree on the disposition of the colonies which the peace treaty required Italy to give up. So, by a clause in the treaty, the question was referred to the General Assembly for settlement. The Assembly decided Nov. 21, 1949, that Libya should become independent on Jan. 1, 1952, and that Somaliland should be a U. N. trusteeship under Italian administration for 10 years, after which it would be independent. Eritrea was later federated with Ethiopia.

### INDIA-PAKISTAN

On Jan. 2, 1948, India appealed to the U. N. to stop alleged aggression by Pakistan. Fighting had broken out over which nation should control the province of Kashmir. The Security Council sent a commission, which proposed that Kashmir's future be determined by a plebiscite. The Council agreed on Apr. 21, but both sides raised objections. Early in 1949, the U. N. commission succeeded in obtaining



a truce; and, on Mar. 14, 1950, the Council substituted a mediator, who was to seek demilitarization of the areas of Kashmir held by India and Pakistan and to try for a plebiscite. Two mediators failed.

### MEMBERSHIP

In 1949, 13 nations sought membership in the U. N. The West regarded 5 of them as Russian satellites—Albania, Bulgaria, Hungary, Mongolian People's Republic and Rumania. They failed to get sufficient votes for membership. The West favored membership of the other 8 nations—Austria, Ceylon, Finland, Ireland, Italy, Jordan, Nepal and Portugal. Russia, however, vetoed them all.

On Sept. 18-19, 1952, Russia vetoed Japan and Indo-China as members.

### RUSSIAN BOYCOTT

Soviet Delegate Malik walked out of the Security Council on Jan. 13, 1950, because it had refused (6-3) Russia's demand that Nationalist China be replaced in the U. N.

by Communist China. The boycott ended on Aug. 1. Again the Council voted (8-3) to refuse membership to Communist China.

### KOREA

Russia occupied the northern half of Korea after World War II, and the U. S. occupied the southern half below the 38th parallel. The understanding was that the occupying powers would set up an independent republic to govern the entire country. Russia refused to co-operate. The U. S. then referred the problem to the U. N., and the General Assembly voted Nov. 5, 1947, to send a commission to Korea to set up a free government. Russia, however, boycotted the commission and refused to allow it to enter North Korea. The commission therefore supervised free elections in South Korea and assisted in setting up the Republic of Korea with its capital at Seoul.

(For U. N. action after the warfare began in Korea, see the index under Korean War.)

## The 60 Members of the United Nations, Sept., 1954

Country	Signed U. N. Decla- ration <sup>1</sup>	Joined U. N. Organi- zation <sup>2</sup>	League of Nations <sup>3</sup>	Country	Signed U. N. Decla- ration <sup>1</sup>	Joined U. N. Organi- zation <sup>2</sup>	League of Nations <sup>3</sup>
Afghanistan.....	.....	1946	1934-46	Iraq.....	1943	1945	1932-46
Argentina.....	1945	1945	1919-46	Israel.....	.....	1949	.....
Australia.....	1942	1945	1920-46	Lebanon.....	1945	1945	.....
Belgium.....	1942	1945	1920-46	Liberia.....	1944	1945	1920-46
Bolivia.....	1943	1945	1920-46	Luxemburg.....	1942	1945	1920-46
Brazil.....	1943	1945	1920-28	Mexico.....	1942	1945	1931-46
Burma.....	.....	1948	.....	Netherlands.....	1942	1945	1920-46
Byelorussian S.S.R. <sup>4</sup> .....	.....	1945	.....	New Zealand.....	1942	1945	1920-46
Canada.....	1942	1945	1920-46	Nicaragua.....	1942	1945	1920-38
Chile.....	1945	1945	1919-40	Norway.....	1942	1945	1920-46
China.....	1942	1945	1920-46	Pakistan.....	.....	1947	.....
Colombia.....	1944	1945	1920-46	Panamá.....	1942	1945	1920-46
Costa Rica.....	1942	1945	1920-26	Paraguay.....	1945	1945	1920-37
Cuba.....	1942	1945	1920-46	Peru.....	1945	1945	1920-41
Czechoslovakia.....	1942	1945	1920-46	Philippines.....	1942	1945	.....
Denmark <sup>5</sup> .....	.....	1945	1920-46	Poland <sup>6</sup> .....	1942	1945	1920-46
Dominican Republic.....	1942	1945	1924-46	Saudi Arabia.....	1945	1945	.....
Ecuador.....	1945	1945	1934-46	South Africa, U. of.....	1942	1945	1920-46
Egypt.....	1945	1945	1937-46	Sweden.....	.....	1946	1920-46
El Salvador.....	1942	1945	1920-39	Syria.....	1945	1945	.....
Ethiopia.....	1943	1945	1923-46	Thailand.....	.....	1946	1920-46
France.....	1945	1945	1920-46	Turkey.....	1945	1945	1932-46
Greece.....	1942	1945	1920-46	Ukrainian S.S.R. <sup>4</sup> .....	.....	1945	.....
Guatemala.....	1942	1945	1920-38	United Kingdom.....	1942	1945	1920-46
Haiti.....	1942	1945	1920-44	United States.....	1942	1945	.....
Honduras.....	1942	1945	1920-38	U.S.S.R.....	1942	1945	1934-39
Iceland.....	.....	1946	.....	Uruguay.....	1945	1945	1920-46
India.....	1942	1945	1920-46	Venezuela.....	1945	1945	1920-40
Indonesia.....	.....	1950	.....	Yemen.....	.....	1947	.....
Iran.....	1943	1945	1919-46	Yugoslavia.....	1942	1945	1920-46

<sup>1</sup> Declaration of United Nations was originally signed by 26 nations in Washington, D.C., on Jan. 1, 1942. <sup>2</sup> U. N. officially came into existence Oct. 24, 1945. <sup>3</sup> League was formally dissolved Apr. 18, 1946. Nations withdrawing before that time did so voluntarily, except U.S.S.R., which was expelled. Other members of League were: Albania (1920-46), Austria (1920-40), Bulgaria (1920-46), Elre (1923-46), Estonia (1921-46), Finland (1920-46), Germany (1926-35), Hungary (1922-41), Italy (1920-39), Japan (1920-35), Latvia (1921-46), Lithuania (1921-46), Portugal (1920-46), Rumania (1920-42), Spain (1920-41), Switzerland (1920-46). <sup>4</sup> Admission as separate nation approved at San Francisco Conference. <sup>5</sup> Invited to attend San Francisco Conference June 5, 1945, after its liberation. <sup>6</sup> Not represented at San Francisco Conference, but subsequently signed Charter as original member.

## Delegation Heads to the United Nations

### Members Represented at Headquarters\*

<b>Afghanistan:</b> Mohammed Kabir Ludin	<b>Iraq:</b> Awni Khalidi
<b>Argentina:</b> Dr. Juan I. Cooke	<b>Israel:</b> Abba Eban
<b>Australia:</b> W. D. Forsyth	<b>Lebanon:</b> Edward Rizk
<b>Belgium:</b> Fernand van Langenhove	<b>Liberia:</b> Richard S. S. Bright
<b>Bolivia:</b> Germán Quiroga Galdo	<b>Mexico:</b> Rafael de la Colina
<b>Brazil:</b> Ernesto Leme	<b>Netherlands:</b> D. J. von Balluseck
<b>Burma:</b> Thray Sithu James Barrington	<b>New Zealand:</b> Leslie Knox Munro
<b>Canada:</b> D. M. Johnson	<b>Nicaragua:</b> Guillermo Sevilla-Sacasa
<b>Chile:</b> Rudecindo Ortega	<b>Norway:</b> Hans Engen
<b>China:</b> Tingfu F. Tsiang	<b>Pakistan:</b> Ahmed S. Bokhari
<b>Colombia:</b> Dr. Francisco Urrutia	<b>Panamá:</b> Eusebio A. Morales
<b>Costa Rica:</b> Rev. Benjamin Nuñez	<b>Paraguay:</b> Fernando A. Caballero-Marsal
<b>Cuba:</b> Emilio Nuñez-Portuondo	<b>Peru:</b> Carlos Holguín
<b>Czechoslovakia:</b> Jiri Nosek	<b>Philippines:</b> Felixberto M. Serrano
<b>Denmark:</b> William Borberg	<b>Poland:</b> Henryk Błeckl
<b>Dominican Republic:</b> Dr. Tulio Franco y Franco	<b>Saudi Arabia:</b> Asad Al-Faqih
<b>Ecuador:</b> José Vicente Trujillo	<b>Sweden:</b> Oscar Thorsing
<b>Egypt:</b> Maj. Gen. Abdel Hamid Ghaleb	<b>Syria:</b> Rafik Asha
<b>El Salvador:</b> Miguel Rafael Urquía	<b>Thailand:</b> Prince Wan Waihayakon
<b>Ethiopia:</b> Ato Zaudi Heywot	<b>Turkey:</b> Selim Sarper
<b>France:</b> Henri Hoppenot	<b>Union of South Africa:</b> Wentzel Christoffel du Plessis
<b>Greece:</b> Christian X. Palamas	<b>U.S.S.R.:</b> Andrei Vishinsky
<b>Guatemala:</b> Eduardo Castillo-Arriola	<b>United Kingdom:</b> Sir Pierson Dixon
<b>Haiti:</b> Luc Fouche	<b>United States:</b> Henry Cabot Lodge, Jr.
<b>Honduras:</b> Tiburcio Carías, Jr.	<b>Uruguay:</b> Enrique Rodríguez Fabregat
<b>Iceland:</b> Thor Thors	<b>Venezuela:</b> Santiago Pérez-Pérez
<b>India:</b> Rajeshwar Dayal	<b>Yugoslavia:</b> Dr. Joža Brilej
<b>Indonesia:</b> Sudjarwo Tjondronegoro	
<b>Iran:</b> Ali Gholi Ardalan	

\* Permanent representative to U. N. as of June 1954.

### Security Council\*

<b>Brazil:</b> Ernesto Leme	<b>New Zealand:</b> Leslie Knox Munro
<b>China:</b> Dr. Tingfu F. Tsiang	<b>Turkey:</b> Selim Sarper
<b>Colombia:</b> Dr. Francisco Urrutia	<b>U.S.S.R.:</b> Andrei Vishinsky
<b>Denmark:</b> William Borberg	<b>United Kingdom:</b> Sir Pierson Dixon
<b>France:</b> Henri Hoppenot	<b>United States:</b> Henry Cabot Lodge, Jr.
<b>Lebanon:</b> Dr. Charles Malik	

\* As of 1954.

### Economic and Social Council\*

<b>Argentina:</b> Dr. Juan I. Cooke	<b>Norway:</b> Hans Engen
<b>Australia:</b> Sir Douglas Berry Copland	<b>Pakistan:</b> Said Hasan
<b>Belgium:</b> Henri Janne	<b>Turkey:</b> Selim Sarper
<b>China:</b> Dr. C. L. Hsia	<b>U.S.S.R.:</b> (No information available)
<b>Cuba:</b> Dr. Emilio Nuñez-Portuondo	<b>United Kingdom:</b> (No information available)
<b>Czechoslovakia:</b> (No information available)	
<b>Ecuador:</b> Dr. José Vicente Trujillo	<b>United States:</b> Preston Hotchkiss
<b>Egypt:</b> Dr. Mahmoud Azmi	<b>Venezuela:</b> Dr. Victor Montoya
<b>France:</b> Pierre Abelin	<b>Yugoslavia:</b> (No information available)
<b>India:</b> Sardar Swaran Singh	

\* As of 18th session.

### Trusteeship Council\*

<b>Australia:</b> W. D. Forsyth	<b>New Zealand:</b> Leslie Knox Munro
<b>Belgium:</b> Pierre Ryckmans	<b>Syria:</b> Rafik Asha
<b>China:</b> Dr. Shih-Shun Liu	<b>U.S.S.R.:</b> Semyon K. Tsarapkin
<b>El Salvador:</b> Dr. Miguel Rafael Urquía	<b>United Kingdom:</b> Sir Alan Cuthbert Burns
<b>France:</b> Léon Pignon	<b>United States:</b> Mason Sears
<b>Haiti:</b> Max H. Dorsinville	
<b>India:</b> V. K. Krishna Menon	

\* As of 14th session.

## Nations Serving Terms on U. N. Councils

### Security Council

Permanent members: China; France; United Kingdom; U. S.; U.S.S.R.

Jan. 1946-Dec. 1946: Egypt; Mexico; Netherlands.

Jan. 1946-Dec. 1947: Australia; Brazil; Poland.

Jan. 1947-Dec. 1948: Belgium; Colombia; Syria.

Jan. 1948-Dec. 1949: Argentina; Canada; Ukrainian S.S.R.

Jan. 1949-Dec. 1950: Cuba; Egypt; Norway.

Jan. 1950-Dec. 1951: Ecuador; India; Yugoslavia.

Jan. 1951-Dec. 1952: Brazil; Netherlands; Turkey.

Jan. 1952-Dec. 1953: Chile; Greece; Pakistan.

Jan. 1953-Dec. 1954: Colombia; Denmark; Lebanon.

Jan. 1954-Dec. 1955: Brazil; New Zealand; Turkey.

### Economic and Social Council

Jan. 1946-Dec. 1946: Colombia; Greece; Lebanon; Ukrainian S.S.R.; U. S.; Yugoslavia.

Jan. 1946-Dec. 1947: Cuba; Czechoslovakia; India; Norway; United Kingdom; U.S.S.R.

Jan. 1946-Dec. 1948: Belgium; Canada; Chile; China; France; Peru.

Jan. 1947-Dec. 1949: Byelorussian S.S.R.; Lebanon; New Zealand; Turkey; U. S.; Venezuela.

Jan. 1948-Dec. 1950: Australia; Brazil; Denmark; Poland; United Kingdom; U.S.S.R.

Jan. 1949-Dec. 1951: Belgium; Chile; China; France; India; Peru.

Jan. 1950-Dec. 1952: Canada; Czechoslovakia; Iran; Mexico; Pakistan; U. S.

Jan. 1951-Dec. 1953: Philippines; Poland; Sweden; United Kingdom; Uruguay; U.S.S.R.

Jan. 1952-Dec. 1954: Argentina; Belgium; China; Cuba; France; Egypt.

Jan. 1953-Dec. 1955: Australia; India; Turkey; U. S.; Venezuela; Yugoslavia.

Jan. 1954-Dec. 1956: Czechoslovakia; Ecuador; Norway; Pakistan; United Kingdom; U.S.S.R.

### Trusteeship Council

Permanent members: Australia\*; Belgium\*; China†; France\*; New Zealand\*; United Kingdom\*; U. S.\*; U.S.S.R.†

Jan. 1947-Dec. 1949: Iraq; Mexico.

Jan. 1948-Dec. 1950: Costa Rica (resigned 1949 and replaced by Dominican Republic); Philippines.

Jan. 1950-Dec. 1952: Argentina (resigned 1951 and replaced by El Salvador); Iraq.

Jan. 1951-Dec. 1953: Dominican Republic; Thailand.

Jan. 1953-Dec. 1955: El Salvador; Syria.

Jan. 1954-Dec. 1956: Haiti; India.

\* Administering trust territories. † Permanent member of Security Council not administering territories.

## Specialized Agencies of the United Nations

Source: U. N. Dept. of Public Information (Research Section)

### Food and Agriculture Organization of the United Nations (FAO)

Established: Oct. 16, 1945, when constitution was signed in Quebec.

Purposes: To raise nutrition levels and living standards; to secure improvements in production and distribution of food and agricultural products.

Headquarters: Viale delle Terme Di Caracalla, Rome, Italy.

### Inter-Governmental Maritime Consultative Organization (IMCO)

Established: Will come into existence when 21 nations, of which 7 must each have a total tonnage of at least one million gross tons of shipping, have become parties to convention drawn up by U. N. Maritime Conference at Geneva, Feb. 19 to Mar. 6, 1948. (Preparatory Committee established by Conference will cease to exist after IMCO comes into being.)

Purposes: To promote co-operation among governments in technical problems of international shipping and to encourage removal of discriminatory action by governments and of unfair restrictive practices by shipping concerns.

Headquarters: To be in London.

### International Bank for Reconstruction and Development (Bank)

Established: Dec. 27, 1945, when 28 nations signed Articles of Agreement drawn up at Bretton Woods Conference in July, 1944.

Purposes: To assist in reconstruction and development of economies of members by making loans directly and promoting private foreign investment; to promote balanced growth of international trade.

Headquarters: 1818 H St., NW, Washington 25, D. C.

### International Civil Aviation Organization (ICAO)

Established: Apr. 4, 1947, 30 days after 26th nation ratified Convention on International Civil Aviation adopted Dec. 7, 1944, by Chicago International Civil Aviation Conference.

Purposes: To study problems of international civil aviation and establish international standards and regulations.

Headquarters: International Aviation Bldg., Montreal, Canada.

### International Labour Organisation (ILO)

Established: Apr. 11, 1919, when consti-



tution was adopted as Part XIII of Treaty of Versailles.

**Purposes:** To contribute to establishment of lasting peace by promoting social justice; to improve, through international action, labor conditions and living standards; to promote economic and social stability.

**Headquarters:** Geneva, Switzerland.

**International Monetary Fund (Fund)**

**Established:** Dec. 27, 1945, when nations whose quotas amounted to 80% of Fund's resources had signed Articles of Agreement drawn up at Bretton Woods.

**Purposes:** To promote international monetary co-operation and expansion of international trade; to promote exchange stability; to assist in establishment of multilateral system of payments in respect of current transactions between members.

**Headquarters:** 1818 H St., NW, Washington 25, D. C.

**International Telecommunication Union (ITU)**

**Established:** Jan. 1, 1934, when International Telecommunication Convention adopted on Dec. 9, 1932, at Madrid Conference became effective.

**Purposes:** To maintain and extend international co-operation for improvement and rational use of all kinds of telecommunication and to promote development and most efficient operation of technical facilities.

**Headquarters:** Palais Wilson, Geneva, Switzerland.

**International Trade Organization (ITO)**

**Established:** Will come into existence when sufficient number of countries have ratified Havana Charter drawn up by U. N. Conference on Trade and Employment at Havana, Cuba, Nov. 21, 1947, to Mar. 24, 1948. (Interim Commission established by Conference will cease to exist after ITO comes into being.)

**Purposes:** To promote expansion of world trade and removal of trade barriers.

**United Nations Educational, Scientific and Cultural Organization (UNESCO)**

**Established:** Nov. 4, 1946, when 20th

signatory to constitution deposited instrument of acceptance with government of United Kingdom.

**Purposes:** To promote collaboration among nations through education, science and culture in order to further justice, rule of law and human rights and freedoms without distinction of race, sex, language or religion.

**Headquarters:** 19 Ave. Kléber, Paris, 16, France.

**Universal Postal Union (UPU)**

**Established:** Oct. 9, 1874, by Postal Convention of Bern, Switzerland, effective July 1, 1875.

**Purposes:** To assure organization and perfecting of various postal services and to promote development of international collaboration. To this end, member countries are united in single postal territory for reciprocal exchange of mail.

**Headquarters:** Schosshaldenstrasse 46, Bern, Switzerland.

**World Health Organization (WHO)**

**Established:** Apr. 7, 1948, when 26 members of the United Nations had accepted its constitution adopted July 22, 1946, by International Health Conference in New York City.

**Purposes:** To aid attainment by all peoples of highest possible level of health.

**Headquarters:** Palais des Nations, Geneva, Switzerland.

**World Meteorological Organization (WMO)**

**Established:** Mar. 23, 1950, 30 days after deposit with government of U. S. of 30th instrument of ratification or accession to convention adopted in Washington, D. C., Oct. 11, 1947, by twelfth Conference of Directors of International Meteorological Organization (IMO). WMO formally came into being on Apr. 4, 1951.

**Purposes:** To facilitate world-wide co-operation and promote standardization in making of meteorological observations; to further application of meteorology to various human activities.

**Headquarters:** Avenue de la Paix, Campagne Rigot, Geneva, Switzerland.

## Judges of International Court of Justice

(Judges serve for a 9-year term and may be re-elected. Expiration dates of terms are shown in parentheses. The seat of the Court is The Hague, Netherlands.)

**President:** Sir Arnold D. McNair, U. K. (1955)

**Vice President:** José G. Guerrero, El Salvador (1955)

Alejandro Alvarez, Chile (1955)

Enrique C. Armond-Ugon, Uruguay (1961)

Abdel Hamid Badawi, Egypt (1958)

Jules Basdevant, France (1955)

Levi Fernandes Carneiro, Brazil (1955)\*

\* Elected 1951 to fill vacancy caused by death of J. Philadelphia de Barros e Azevedo, of Brazil. † Elected 1953 to fill vacancy caused by resignation of Fergel A. Golinsky of U.S.S.R. NOTE: Vacancy caused by death of Sir Benegal N. Rau of India had not been filled as of July 1954.

Green H. Hackworth, U. S. (1961)

Hsu Mo, China (1958)

Helge Klaestad, Norway (1961)

Feodore Ivanovich Kozhevnikov, U.S.S.R. (1961)†

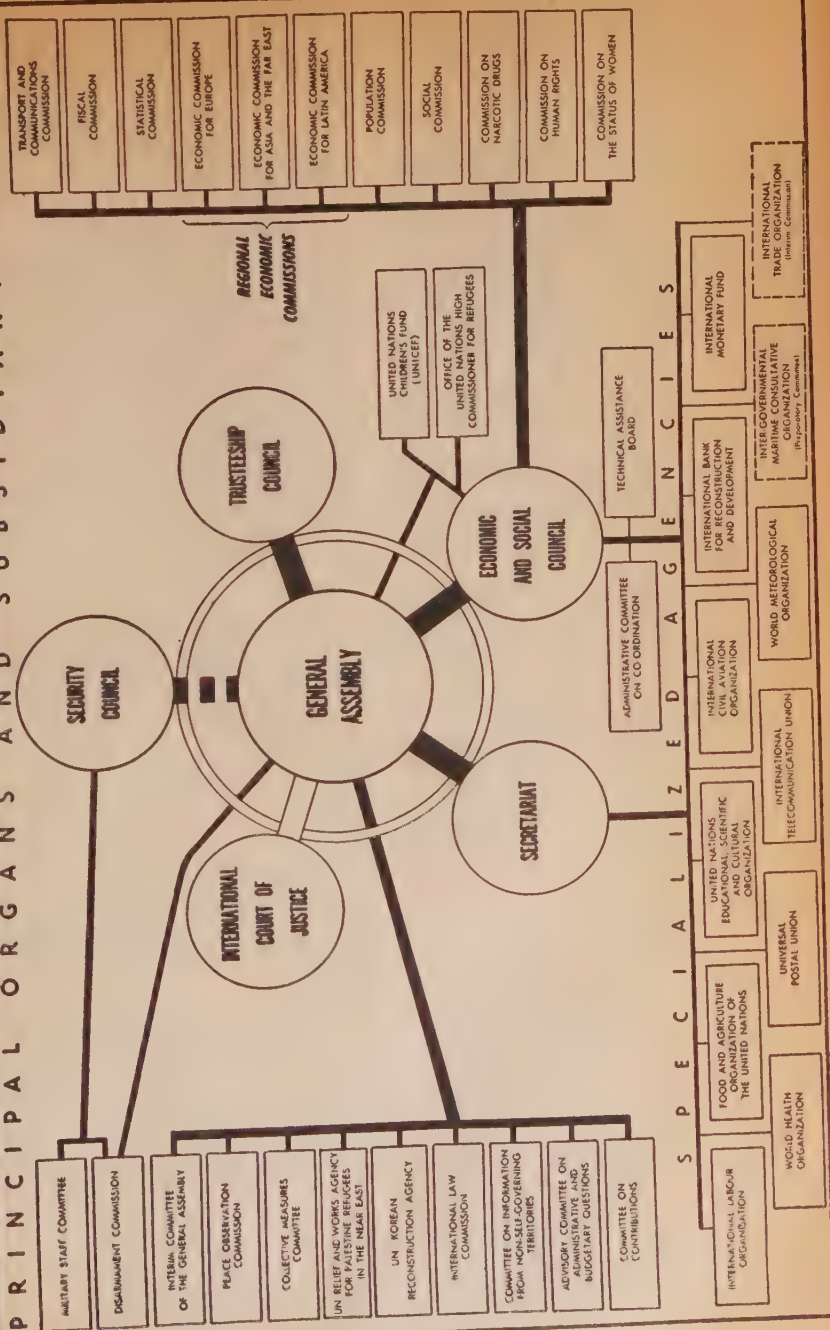
John E. Read, Canada (1958)

Bohdan Winlarski, Poland (1958)

Milovan Zoričić, Yugoslavia (1958)

# ORGANS OF THE UNITED NATIONS

## PRINCIPAL ORGANS AND SUBSIDIARY BODIES



## CHARTER OF THE UNITED NATIONS

**W**E the peoples of the United Nations determined to save succeeding generations from the scourge of war, which twice in our lifetime has brought untold sorrow to mankind, and

To reaffirm faith in fundamental human rights, in the dignity and worth of the human person, in the equal rights of men and women and of nations large and small, and

To establish conditions under which justice and respect for the obligations arising from treaties and other sources of international law can be maintained, and

To promote social progress and better standards of life in larger freedom, and for these ends

To practice tolerance and live together in peace with one another as good neighbors, and

To unite our strength to maintain international peace and security, and

To insure, by the acceptance of principles and the institution of methods, that armed force shall not be used, save in the common interest, and

To employ international machinery for the promotion of the economic and social advancement of all peoples, have resolved to combine our efforts to accomplish these aims.

Accordingly, our respective Governments, through representatives assembled in the city of San Francisco, who have exhibited their full powers found to be in good and due form, have agreed to the present Charter of the United Nations and do hereby establish an international organization to be known as the United Nations.

### CHAPTER I

#### Purposes and Principles

##### Article 1

The purposes of the United Nations are:

1. To maintain international peace and security, and to that end: to take effective collective measures for the prevention and removal of threats to the peace, and for the suppression of acts of aggression or other breaches of the peace, and to bring about by peaceful means, and in conformity with the principles of justice and international law, adjustment or settlement of international disputes or situations which might lead to a breach of the peace;

2. To develop friendly relations among nations based on respect for the principle of equal rights and self-determination of peoples, and to take other appropriate measures to strengthen universal peace;

3. To achieve international cooperation in solving international problems of an economic, social, cultural, or humanitarian

character, and in promoting and encouraging respect for human rights and for fundamental freedoms for all without distinction as to race, sex, language, or religion; and

4. To be a center for harmonizing the actions of nations in the attainment of these common ends.

##### Article 2

The Organization and its Members, in pursuit of the Purposes stated in Article 1, shall act in accordance with the following Principles:

1. The Organization is based on the principle of the sovereign equality of all its Members.

2. All Members, in order to ensure to all of them the rights and benefits resulting from membership, shall fulfill in good faith the obligations assumed by them in accordance with the present Charter.

3. All Members shall settle their international disputes by peaceful means in such a manner that international peace and security, and justice, are not endangered.

4. All Members shall refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any state, or in any other manner inconsistent with the Purposes of the United Nations.

5. All Members shall give the United Nations every assistance in any action it takes in accordance with the present Charter, and shall refrain from giving assistance to any state against which the United Nations is taking preventive or enforcement action.

6. The Organization shall ensure that states which are not Members of the United Nations act in accordance with these Principles so far as may be necessary for the maintenance of international peace and security.

7. Nothing contained in the present Charter shall authorize the United Nations to intervene in matters which are essentially within the domestic jurisdiction of any state or shall require the Members to submit such matters to settlement under the present Charter; but this principle shall not prejudice the application of enforcement measures under Chapter VII.

### CHAPTER II

#### Membership

##### Article 3

The original Members of the United Nations shall be the states which, having participated in the United Nations Conference on International Organization at San Francisco, or having previously signed



the Declaration by United Nations of January 1, 1942, sign the present Charter and ratify it in accordance with Article 110.

#### Article 4

1. Membership in the United Nations is open to all other peace-loving states which accept the obligations contained in the present Charter and, in the judgment of the Organization, are able and willing to carry out these obligations.

2. The admission of any such state to membership in the United Nations will be effected by a decision of the General Assembly upon the recommendation of the Security Council.

#### Article 5

A Member of the United Nations against which preventive or enforcement action has been taken by the Security Council may be suspended from the exercise of the rights and privileges of membership by the General Assembly upon the recommendation of the Security Council. The exercise of these rights and privileges may be restored by the Security Council.

#### Article 6

A Member of the United Nations which has persistently violated the Principles contained in the present Charter may be expelled from the Organization by the General Assembly upon the recommendation of the Security Council.

### CHAPTER III

#### Organs

##### Article 7

1. There are established as the principal organs of the United Nations; a General Assembly, a Security Council, an Economic and Social Council, a Trusteeship Council, an International Court of Justice, and a Secretariat.

2. Such subsidiary organs as may be found necessary may be established in accordance with the present Charter.

##### Article 8

The United Nations shall place no restrictions on the eligibility of men and women to participate in any capacity and under conditions of equality in its principal and subsidiary organs.

### CHAPTER IV

#### The General Assembly Composition

##### Article 9

1. The General Assembly shall consist of all the members of the United Nations.

2. Each Member shall have not more than five representatives in the General Assembly.

#### Functions and Powers

##### Article 10

The General Assembly may discuss any questions or any matters within the scope of the present Charter or relating to the powers and functions of any organs provided for in the present Charter, and, except as provided in Article 12, may make recommendations to the Members of the United Nations or to the Security Council or to both on any such questions or matters.

##### Article 11

1. The General Assembly may consider the general principles of cooperation in the maintenance of international peace and security, including the principles governing disarmament and the regulation of armaments, and may make recommendations with regard to such principles to the Members or to the Security Council or to both.

2. The General Assembly may discuss any questions relating to the maintenance of international peace and security brought before it by any Member of the United Nations, or by the Security Council, or by a state which is not a Member of the United Nations, in accordance with Article 35, paragraph 2, and, except as provided in Article 12, may make recommendations with regard to any such question to the state or states concerned or to the Security Council or to both. Any such question on which action is necessary shall be referred to the Security Council by the General Assembly either before or after discussion.

3. The General Assembly may call the attention of the Security Council to situations which are likely to endanger international peace and security.

4. The powers of the General Assembly set forth in this Article shall not limit the general scope of Article 10.

##### Article 12

1. While the Security Council is exercising in respect of any dispute or situation the functions assigned to it in the present Charter, the General Assembly shall not make any recommendations with regard to that dispute or situation unless the Security Council so requests.

2. The Secretary-General, with the consent of the Security Council, shall notify the General Assembly at each session of any matters relative to the maintenance of international peace and security which are being dealt with by the Security Council and shall similarly notify the General Assembly, or the Members of the United Na-

tions if the General Assembly is not in session, immediately the Security Council ceases to deal with such matters.

### Article 13

1. The General Assembly shall initiate studies and make recommendations for the purpose of:

(a) promoting international cooperation in the political field and encouraging the progressive development of international law and its codification;

(b) promoting international cooperation in the economic, social, cultural, educational, and health fields, and assisting in the realization of human rights and fundamental freedoms for all without distinction as to race, sex, language, or religion.

2. The further responsibilities, functions and powers of the General Assembly with respect to matters mentioned in paragraph 1 (b) above are set forth in Chapters IX and X.

### Article 14

Subject to the provisions of Article 12, the General Assembly may recommend measures for the peaceful adjustment of any situation, regardless of origin, which it deems likely to impair the general welfare or friendly relations among nations, including situations resulting from a violation of the provisions of the present Charter setting forth the Purposes and Principles of the United Nations.

### Article 15

1. The General Assembly shall receive and consider annual and special reports from the Security Council; these reports shall include an account of the measures that the Security Council has decided upon or taken to maintain international peace and security.

2. The General Assembly shall receive and consider reports from the other organs of the United Nations.

### Article 16

The General Assembly shall perform such functions with respect to the international trusteeship system as are assigned to it under Chapters XII and XIII, including the approval of the trusteeship agreements for areas not designated as strategic.

### Article 17

1. The General Assembly shall consider and approve the budget of the Organization.

2. The expenses of the Organization shall be borne by the Members as apportioned by the General Assembly.

3. The General Assembly shall consider and approve any financial and budgetary arrangements with specialized agencies re-

ferred to in Article 57 and shall examine the administrative budgets of such specialized agencies with a view to making recommendations to the agencies concerned.

### Voting

#### Article 18

1. Each member of the General Assembly shall have one vote.

2. Decisions of the General Assembly on important questions shall be made by a two-thirds majority of the members present and voting. These questions shall include: recommendations with respect to the maintenance of international peace and security, the election of the non-permanent members of the Security Council, the election of the members of the Economic and Social Council, the election of members of the Trusteeship Council in accordance with paragraph 1 (c) of Article 86, the admission of new Members to the United Nations, the suspension of the rights and privileges of membership, the expulsion of Members, questions relating to the operation of the trusteeship system, and budgetary questions.

3. Decisions on other questions, including the determination of additional categories of questions to be decided by a two-thirds majority, shall be made by a majority of the members present and voting.

#### Article 19

A Member of the United Nations which is in arrears in the payment of its financial contributions to the Organization shall have no vote in the General Assembly if the amount of its arrears equals or exceeds the amount of the contributions due from it for the preceding two full years. The General Assembly may, nevertheless, permit such a Member to vote if it is satisfied that the failure to pay is due to conditions beyond the control of the Member.

### Procedure

#### Article 20

The General Assembly shall meet in regular annual sessions and in such special sessions as occasion may require. Special sessions shall be convoked by the Secretary-General at the request of the Security Council or of a majority of the Members of the United Nations.

#### Article 21

The General Assembly shall adopt its own rules of procedure. It shall elect its President for each session.

#### Article 22

The General Assembly may establish such subsidiary organs as it deems necessary for the performance of its functions

## CHAPTER V

The Security Council  
Composition

## Article 23

1. The Security Council shall consist of eleven Members of the United Nations. The Republic of China, France, the Union of Soviet Socialist Republics, the United Kingdom of Great Britain and Northern Ireland, and the United States of America shall be permanent members of the Security Council. The General Assembly shall elect six other Members of the United Nations to be non-permanent members of the Security Council, due regard being specially paid, in the first instance to the contribution of members of the United Nations to the maintenance of international peace and security and to the other purposes of the Organization, and also to equitable geographical distribution.

2. The non-permanent members of the Security Council shall be elected for a term of two years. In the first election of the non-permanent members, however, three shall be chosen for a term of one year. A retiring member shall not be eligible for immediate re-election.

3. Each member of the Security Council shall have one representative.

## Functions and Powers

## Article 24

1. In order to insure prompt and effective action by the United Nations, its Members confer on the Security Council primary responsibility for the maintenance of international peace and security, and agree that in carrying out its duties under this responsibility the Security Council acts on their behalf.

2. In discharging these duties the Security Council shall act in accordance with the Purposes and Principles of the United Nations. The specific powers granted to the Security Council for the discharge of these duties are laid down in Chapters VI, VII, VIII, and XII.

3. The Security Council shall submit annual and, when necessary, special reports to the General Assembly for its consideration.

## Article 25

The Members of the United Nations agree to accept and carry out the decisions of the Security Council in accordance with the present Charter.

## Article 26

In order to promote the establishment and maintenance of international peace and security with the least diversion for armaments of the world's human and eco-

nomic resources, the Security Council shall be responsible for formulating, with the assistance of the Military Staff Committee referred to in Article 47, plans to be submitted to the Members of the United Nations for the establishment of a system for the regulation of armaments.

## Voting

## Article 27

1. Each member of the Security Council shall have one vote.

2. Decisions of the Security Council on procedural matters shall be made by an affirmative vote of seven members.

3. Decisions of the Security Council on all other matters shall be made by an affirmative vote of seven members including the concurring votes of the permanent members; provided that, in decisions under Chapter VI, and under paragraph 3 of Article 52, a party to a dispute shall abstain from voting.

## Procedure

## Article 28

1. The Security Council shall be so organized as to be able to function continuously. Each member of the Security Council shall for this purpose be represented at all times at the seat of the Organization.

2. The Security Council shall hold periodic meetings at which each of its members may, if it so desires, be represented by a member of the government or by some other specially designated representative.

3. The Security Council may hold meetings at such places other than the seat of the Organization as in its judgment will best facilitate its work.

## Article 29

The Security Council may establish such subsidiary organs as it deems necessary for the performance of its functions.

## Article 30

The Security Council shall adopt its own rules of procedure, including the method of selecting its President.

## Article 31

Any Member of the United Nations which is not a member of the Security Council may participate, without vote, in the discussion of any question brought before the Security Council whenever the latter considers that the interests of that Member are specially affected.

## Article 32

Any Member of the United Nations which is not a member of the Security



Council or any state which is not a Member of the United Nations, if it is a party to a dispute under consideration by the Security Council, shall be invited to participate, without vote, in the discussion relating to the dispute. The Security Council shall lay down such conditions as it deems just for the participation of a state which is not a Member of the United Nations.

## CHAPTER VI

### Pacific Settlement of Disputes

#### Article 33

1. The parties to any dispute, the continuance of which is likely to endanger the maintenance of international peace and security, shall, first of all, seek a solution by negotiation, enquiry, mediation, conciliation, arbitration, judicial settlement, resort to regional agencies or arrangements, or other peaceful means of their own choice.

2. The Security Council shall, when it deems necessary, call upon the parties to settle their dispute by such means.

#### Article 34

The Security Council may investigate any dispute, or any situation which might lead to international friction or give rise to a dispute, in order to determine whether the continuance of the dispute or situation is likely to endanger the maintenance of international peace and security.

#### Article 35

1. Any Member of the United Nations may bring any dispute, or any situation of the nature referred to in Article 34 to the attention of the Security Council or of the General Assembly.

2. A state which is not a Member of the United Nations may bring to the attention of the Security Council or of the General Assembly any dispute to which it is a party if it accepts in advance, for the purposes of the dispute, the obligations of pacific settlement provided in the present Charter.

3. The proceedings of the General Assembly in respect of matters brought to its attention under this Article will be subject to the provisions of Articles 11 and 12.

#### Article 36

1. The Security Council may, at any stage of a dispute of the nature referred to in Article 33 or of a situation of like nature, recommend appropriate procedures or methods of adjustment.

2. The Security Council should take into consideration any procedures for the settlement of the dispute which have already been adopted by the parties.

3. In making recommendations under this Article the Security Council should also take into consideration that legal disputes should as a general rule be referred by the parties to the International Court of Justice in accordance with the provisions of the Statute of the Court.

#### Article 37

1. Should the parties to a dispute of the nature referred to in Article 33 fail to settle it by the means indicated in that Article, they shall refer it to the Security Council.

2. If the Security Council deems that the continuance of the dispute is in fact likely to endanger the maintenance of international peace and security, it shall decide whether to take action under Article 36 or to recommend such terms of settlement as it may consider appropriate.

#### Article 38

Without prejudice to the provisions of Articles 33 to 37, the Security Council may, if all the parties to any dispute so request, make recommendations to the parties with a view to a pacific settlement of the dispute.

## CHAPTER VII

### Action with Respect to Threats to the Peace, Breaches of the Peace, and Acts of Aggression

#### Article 39

The Security Council shall determine the existence of any threat to the peace, breach of the peace, or act of aggression and shall make recommendations, or decide what measures shall be taken in accordance with Articles 41 and 42, to maintain or restore international peace and security.

#### Article 40

In order to prevent an aggravation of the situation, the Security Council may, before making the recommendations or deciding upon the measures provided for in Article 39, call upon the parties concerned to comply with such provisional measures as it deems necessary or desirable. Such provisional measures shall be without prejudice to the rights, claims, or position of the parties concerned. The Security Council shall duly take account of failure to comply with such provisional measures.

#### Article 41

The Security Council may decide what measures not involving the use of armed force are to be employed to give effect

to its decisions, and it may call upon the Members of the United Nations to apply such measures. These may include complete or partial interruption of economic relations and of rail, sea, air, postal, telegraphic, radio, and other means of communication, and the severance of diplomatic relations.

#### Article 42

Should the Security Council consider that measures provided for in Article 41 would be inadequate or have proved to be inadequate, it may take such action by air, sea, or land forces as may be necessary to maintain or restore international peace and security. Such action may include demonstrations, blockade, and other operations by air, sea, or land forces of Members of the United Nations.

#### Article 43

1. All Members of the United Nations, in order to contribute to the maintenance of international peace and security, undertake to make available to the Security Council, on its call and in accordance with a special agreement or agreements, armed forces, assistance, and facilities, including rights of passage, necessary for the purpose of maintaining international peace and security.

2. Such agreement or agreements shall govern the numbers and types of forces, their degree of readiness and general location, and the nature of the facilities and assistance to be provided.

3. The agreement or agreements shall be negotiated as soon as possible on the initiative of the Security Council. They shall be concluded between the Security Council and Members or between the Security Council and groups of Members and shall be subject to ratification by the signatory states in accordance with their respective constitutional processes.

#### Article 44

When the Security Council has decided to use force it shall, before calling upon a Member not represented on it to provide armed forces in fulfillment of the obligations assumed under Article 43, invite that Member, if the Member so desires, to participate in the decisions of the Security Council concerning the employment of contingents of that Member's armed forces.

#### Article 45

In order to enable the United Nations to take urgent military measures, Members shall hold immediately available national air-force contingents for combined international enforcement action. The strength and degree of readiness of these contingents and plans for their combined action shall be determined, within the limits laid

down in the special agreement or agreements referred to in Article 43, by the Security Council with the assistance of the Military Staff Committee.

#### Article 46

Plans for the application of armed force shall be made by the Security Council with the assistance of the Military Staff Committee.

#### Article 47

1. There shall be established a Military Staff Committee to advise and assist the Security Council on all questions relating to the Security Council's military requirements for the maintenance of international peace and security, the employment and command of forces placed at its disposal, the regulation of armaments, and possible disarmament.

2. The Military Staff Committee shall consist of the Chiefs of Staff of the permanent members of the Security Council or their representatives. Any Member of the United Nations not permanently represented on the Committee shall be invited by the Committee to be associated with it when the efficient discharge of the Committee's responsibilities requires the participation of that Member in its work.

3. The Military Staff Committee shall be responsible under the Security Council for the strategic direction of any armed forces placed at the disposal of the Security Council. Questions relating to the command of such forces shall be worked out subsequently.

4. The Military Staff Committee, with the authorization of the Security Council and after consultation with appropriate regional agencies, may establish regional subcommittees.

#### Article 48

1. The action required to carry out the decisions of the Security Council for the maintenance of international peace and security shall be taken by all the Members of the United Nations or by some of them, as the Security Council may determine.

2. Such decisions shall be carried out by the Members of the United Nations directly and through their action in the appropriate international agencies of which they are members.

#### Article 49

The Members of the United Nations shall join in affording mutual assistance in carrying out the measures decided upon by the Security Council.

#### Article 50

If preventive or enforcement measures against any state are taken by the Security Council, any other state, whether a

Member of the United Nations or not, which finds itself confronted with special economic problems arising from the carrying out of those measures shall have the right to consult the Security Council with regard to a solution of those problems.

### Article 51

Nothing in the present Charter shall impair the inherent right of individual or collective self-defense if an armed attack occurs against a Member of the United Nations, until the Security Council has taken measures necessary to maintain international peace and security. Measures taken by Members in the exercise of this right of self-defense shall be immediately reported to the Security Council and shall not in any way affect the authority and responsibility of the Security Council under the present Charter to take at any time such action as it deems necessary in order to maintain or restore international peace and security.

## CHAPTER VIII

### Regional Arrangements

#### Article 52

1. Nothing in the present Charter precludes the existence of regional arrangements or agencies for dealing with such matters relating to the maintenance of international peace and security as are appropriate for regional action, provided that such arrangements or agencies and their activities are consistent with the Purposes and Principles of the United Nations.

2. The Members of the United Nations entering into such arrangements or constituting such agencies shall make every effort to achieve pacific settlement of local disputes through such regional arrangements or by such regional agencies before referring them to the Security Council.

3. The Security Council shall encourage the development of pacific settlement of local disputes through such regional arrangements or by such regional agencies either on the initiative of the states concerned or by reference from the Security Council.

4. This Article in no way impairs the application of Articles 34 and 35.

#### Article 53

1. The Security Council shall, where appropriate, utilize such regional arrangements or agencies for enforcement action under its authority. But no enforcement action shall be taken under regional arrangements or by regional agencies without the authorization of the Security Council, with the exception of measures against any enemy state, as defined in paragraph 2 of this Article, provided for pursuant to Article 107 or in regional arrangements directed against renewal of aggressive policy on the part of any such state, until such time as the Organization may, on request of the Governments concerned, be charged with the responsibility for preventing further aggression by such a state.

2. The term enemy state as used in paragraph 1 of this Article applies to any state which during the Second World War has been an enemy of any signatory of the present Charter.

### Article 54

The Security Council shall at all times be kept fully informed of activities undertaken or in contemplation under regional arrangements or by regional agencies for the maintenance of international peace and security.

## CHAPTER IX

### International Economic and Social Cooperation

#### Article 55

With a view to the creation of conditions of stability and well-being which are necessary for peaceful and friendly relations among nations based on respect for the principle of equal rights and self-determination of peoples, the United Nations shall promote:

(a) higher standards of living, full employment, and conditions of economic and social progress and development;

(b) solutions of international economic, social, health, and related problems; and international cultural and educational cooperation; and

(c) universal respect for, and observance of, human rights and fundamental freedoms for all without distinction as to race, sex, language, or religion.

#### Article 56

All Members pledge themselves to take joint and separate action in cooperation with the Organization for the achievement of the purposes set forth in Article 55.

#### Article 57

1. The various specialized agencies, established by intergovernmental agreement and having wide international responsibilities, as defined in their basic instruments, in economic, social, cultural, educational, health, and related fields, shall be brought into relationship with the United Nations in accordance with the provisions of Article 63.

2. Such agencies thus brought into relationship with the United Nations are



hereinafter referred to as specialized agencies.

### Article 58

The Organization shall make recommendations for the coordination of the policies and activities of the specialized agencies.

### Article 59

The Organization shall, where appropriate, initiate negotiations among the states concerned for the creation of any new specialized agencies required for the accomplishment of the purposes set forth in Article 55.

### Article 60

Responsibility for the discharge of the functions of the Organization set forth in this Chapter shall be vested in the General Assembly and, under the authority of the General Assembly, in the Economic and Social Council, which shall have for this purpose the powers set forth in Chapter X.

## CHAPTER X

### Economic and Social Council Composition

#### Article 61

1. The Economic and Social Council shall consist of eighteen Members of the United Nations elected by the General Assembly.

2. Subject to the provisions of paragraph 3, six members of the Economic and Social Council shall be elected each year for a term of three years. A retiring member shall be eligible for immediate re-election.

3. At the first election, eighteen members of the Economic and Social Council shall be chosen. The term of office of six members so chosen shall expire at the end of one year, and of six other members at the end of two years, in accordance with arrangements made by the General Assembly.

4. Each member of the Economic and Social Council shall have one representative.

### Functions and Powers

#### Article 62

1. The Economic and Social Council may make or initiate studies and reports with respect to international economic, social, cultural, educational, health, and related matters and may make recommendations with respect to any such matters to the General Assembly, to the Members of the United Nations, and to the specialized agencies concerned.

2. It may make recommendations for the purpose of promoting respect for, and observance of, human rights and fundamental freedoms for all.

3. It may prepare draft conventions for submission to the General Assembly, with respect to matters falling within its competence.

4. It may call, in accordance with the rules prescribed by the United Nations, international conferences on matters falling within its competence.

### Article 63

1. The Economic and Social Council may enter into agreements with any of the agencies referred to in Article 57, defining the terms on which the agency concerned shall be brought into relationship with the United Nations. Such agreements shall be subject to approval by the General Assembly.

2. It may coordinate the activities of the specialized agencies through consultation with and recommendations to such agencies and through recommendations to the General Assembly and to the Members of the United Nations.

### Article 64

1. The Economic and Social Council may take appropriate steps to obtain regular reports from the specialized agencies. It may make arrangements with the Members of the United Nations and with the specialized agencies to obtain reports on the steps taken to give effect to its own recommendations and to recommendations on matters falling within its competence made by the General Assembly.

2. It may communicate its observations on these reports to the General Assembly.

### Article 65

The Economic and Social Council may furnish information to the Security Council and shall assist the Security Council upon its request.

### Article 66

1. The Economic and Social Council shall perform such functions as fall within its competence in connection with the carrying out of the recommendations of the General Assembly.

2. It may, with the approval of the General Assembly, perform services at the request of Members of the United Nations and at the request of specialized agencies.

3. It shall perform such other functions as are specified elsewhere in the present Charter or as may be assigned to it by the General Assembly.

### Voting

#### Article 67

1. Each member of the Economic and Social Council shall have one vote.

2. Decisions of the Economic and Social Council shall be made by a majority of the members present and voting.

## Procedure

### Article 68

The Economic and Social Council shall set up commissions in economic and social fields and for the promotion of human rights, and such other commissions as may be required for the performance of its functions.

### Article 69

The Economic and Social Council shall invite any Member of the United Nations to participate, without vote, in its deliberations on any matter of particular concern to that Member.

### Article 70

The Economic and Social Council may make arrangements for representatives of the specialized agencies to participate, without vote, in its deliberations and in those of the commissions established by it, and for its representatives to participate in the deliberations of the specialized agencies.

### Article 71

The Economic and Social Council may make suitable arrangements for consultation with non-governmental organizations which are concerned with matters within its competence. Such arrangements may be made with international organizations and, where appropriate, with national organizations after consultation with the Member of the United Nations concerned.

### Article 72

1. The Economic and Social Council shall adopt its own rules of procedure, including the method of selecting its President.

2. The Economic and Social Council shall meet as required in accordance with its rules, which shall include provision for the convening of meetings on the request of a majority of its members.

## CHAPTER XI

### Declaration Regarding Non-Self-Governing Territories

#### Article 73

Members of the United Nations which have or assume responsibilities for the administration of territories whose peoples have not yet attained a full measure of self-government recognize the principle that the interests of the inhabitants of these territories are paramount, and ac-

cept as a sacred trust the obligation to promote to the utmost, within the system of international peace and security established by the present Charter, the well-being of the inhabitants of these territories, and, to this end:

(a) to ensure, with due respect for the culture of the peoples concerned, their political, economic, social, and educational advancement, their just treatment, and their protection against abuses;

(b) to develop self-government, to take due account of the political aspirations of the peoples, and to assist them in the progressive development of their free political institutions, according to the particular circumstances of each territory and its peoples and their varying stages of advancement;

(c) to further international peace and security;

(d) to promote constructive measures of development, to encourage research, and to cooperate with one another and, when and where appropriate, with specialized international bodies with a view to the practical achievement of the social, economic and scientific purposes set forth in this Article; and

(e) to transmit regularly to the Secretary-General for information purposes, subject to such limitation as security and constitutional considerations may require, statistical and other information of a technical nature relating to economic, social, and educational conditions in the territories for which they are respectively responsible other than those territories to which Chapters XII and XIII apply.

### Article 74

Members of the United Nations also agree that their policy in respect of the territories to which this Chapter applies, no less than in respect of their metropolitan areas, must be based on the general principle of good-neighborliness, due account being taken of the interests and well-being of the rest of the world, in social, economic, and commercial matters.

## CHAPTER XII

### International Trusteeship System

#### Article 75

The United Nations shall establish under its authority an international trusteeship system for the administration and supervision of such territories as may be placed thereunder by subsequent individual agreements. These territories are herein-after referred to as trust territories.

#### Article 76

The basic objectives of the trusteeship system, in accordance with the Purposes

of the United Nations laid down in Article 1 of the present Charter, shall be:

(a) to further international peace and security;

(b) to promote the political, economic, social, and educational advancement of the inhabitants of the trust territories, and their progressive development towards self-government or independence as may be appropriate to the particular circumstances of each territory and its peoples and the freely expressed wishes of the peoples concerned, and as may be provided by the terms of each trusteeship agreement;

(c) to encourage respect for human rights and for fundamental freedoms for all without distinction as to race, sex, language, or religion, and to encourage recognition of the interdependence of the peoples of the world; and

(d) to ensure equal treatment in social, economic, and commercial matters for all Members of the United Nations and their nationals, and also equal treatment for the latter in the administration of justice, without prejudice to the attainment of the foregoing objectives and subject to the provisions of Article 80.

#### Article 77

1. The trusteeship system shall apply to such territories in the following categories as may be placed thereunder by means of trusteeship agreements:

(a) territories now held under mandate;

(b) territories which may be detached from enemy states as a result of the Second World War; and

(c) territories voluntarily placed under the system by states responsible for their administration.

2. It will be a matter for subsequent agreement as to which territories in the foregoing categories will be brought under the trusteeship system and upon what terms.

#### Article 78

The trusteeship system shall not apply to territories which have become Members of the United Nations, relationship among which shall be based on respect for the principle of sovereign equality.

#### Article 79

The terms of trusteeship for each territory to be placed under the trusteeship system, including any alteration or amendment, shall be agreed upon by the states directly concerned, including the mandatory power in the case of territories held under mandate by a Member of the United Nations, and shall be approved as provided for in Articles 83 and 85.

#### Article 80

1. Except as may be agreed upon in individual trusteeship agreements, made under Articles 77, 79, and 81, placing each territory under the trusteeship system, and until such agreements have been concluded, nothing in this Chapter shall be construed in or of itself to alter in any manner the rights whatsoever of any states or any peoples or the terms of existing international instruments to which Members of the United Nations may respectively be parties.

2. Paragraph 1 of this Article shall not be interpreted as giving grounds for delay or postponement of the negotiation and conclusion of agreements for placing mandated and other territories under the trusteeship system as provided for in Article 77.

#### Article 81

The trusteeship agreement shall in each case include the terms under which the trust territory will be administered and designate the authority which will exercise the administration of the trust territory. Such authority, hereinafter called the administering authority, may be one or more states or the Organization itself.

#### Article 82

There may be designated, in any trusteeship agreement, a strategic area or areas which may include part or all of the trust territory to which the agreement applies, without prejudice to any special agreement or agreements made under Article 43.

#### Article 83

1. All functions of the United Nations relating to strategic areas, including the approval of the terms of the trusteeship agreements and of their alteration or amendment, shall be exercised by the Security Council.

2. The basic objectives set forth in Article 76 shall be applicable to the people of each strategic area.

3. The Security Council shall, subject to the provisions of the trusteeship agreements and without prejudice to security considerations, avail itself of the assistance of the Trusteeship Council to perform those functions of the United Nations under the trusteeship system relating to political, economic, social, and educational matters in the strategic areas.

#### Article 84

It shall be the duty of the administering authority to ensure that the trust territory shall play its part in the maintenance of international peace and security. To this end the administering authority may make use of volunteer forces, facili-



ties, and assistance from the trust territory in carrying out the obligations towards the Security Council undertaken in this regard by the administering authority, as well as for local defense and the maintenance of law and order within the trust territory.

### Article 85

1. The functions of the United Nations with regard to trusteeship agreements for all areas not designated as strategic, including the approval of the terms of the trusteeship agreements and of their alteration or amendment, shall be exercised by the General Assembly.

2. The Trusteeship Council, operating under the authority of the General Assembly, shall assist the General Assembly in carrying out these functions.

## CHAPTER XIII

### The Trusteeship Council Composition

#### Article 86

1. The Trusteeship Council shall consist of the following Members of the United Nations:

(a) those Members administering trust territories;

(b) such of those Members mentioned by name in Article 23 as are not administering trust territories; and

(c) as many other Members elected for three-year terms by the General Assembly as may be necessary to ensure that the total number of members of the Trusteeship Council is equally divided between those Members of the United Nations which administer trust territories and those which do not.

2. Each member of the Trusteeship Council shall designate one specially qualified person to represent it therein.

### Functions and Powers

#### Article 87

The General Assembly and, under its authority, the Trusteeship Council, in carrying out their functions, may:

(a) consider reports submitted by the administering authority;

(b) accept petitions and examine them in consultation with the administering authority;

(c) provide for periodic visits to the respective trust territories at times agreed upon with the administering authority; and

(d) take these and other actions in conformity with the terms of the trusteeship agreements.

### Article 88

The Trusteeship Council shall formulate a questionnaire on the political, economic, social, and educational advancement of the inhabitants of each trust territory, and the administering authority for each trust territory within the competence of the General Assembly shall make an annual report to the General Assembly upon the basis of such questionnaire.

### Voting

#### Article 89

1. Each member of the Trusteeship Council shall have one vote.

2. Decisions of the Trusteeship Council shall be made by a majority of the members present and voting.

### Procedure

#### Article 90

1. The Trusteeship Council shall adopt its own rules of procedure, including the method of selecting its President.

2. The Trusteeship Council shall meet as required in accordance with its rules, which shall include provision for the convening of meetings on the request of a majority of its members.

### Article 91

The Trusteeship Council shall, when appropriate, avail itself of the assistance of the Economic and Social Council and of the specialized agencies in regard to matters with which they are respectively concerned.

## CHAPTER XIV

### The International Court of Justice

#### Article 92

The International Court of Justice shall be the principal judicial organ of the United Nations. It shall function in accordance with the annexed Statute, which is based upon the Statute of the Permanent Court of International Justice and forms an integral part of the present Charter.

#### Article 93

1. All Members of the United Nations are *ipso facto* parties to the Statute of the International Court of Justice.

2. A state which is not a Member of the United Nations may become a party to the Statute of the International Court of Justice on condition to be determined in each case by the General Assembly upon the recommendation of the Security Council.

#### Article 94

1. Each Member of the United Nations undertakes to comply with the decision of

the International Court of Justice in any case to which it is a party.

2. If any party to a case fails to perform the obligations incumbent upon it under a judgment rendered by the Court, the other party may have recourse to the Security Council, which may, if it deems necessary, make recommendations or decide upon measures to be taken to give effect to the judgment.

#### Article 95

Nothing in the present Charter shall prevent Members of the United Nations from entrusting the solution of their differences to other tribunals by virtue of agreements already in existence or which may be concluded in the future.

#### Article 96

1. The General Assembly or the Security Council may request the International Court of Justice to give an advisory opinion on any legal question.

2. Other organs of the United Nations and specialized agencies, which may at any time be so authorized by the General Assembly, may also request advisory opinions of the Court on legal questions arising within the scope of their activities.

### CHAPTER XV

#### The Secretariat

##### Article 97

The Secretariat shall comprise a Secretary-General and such staff as the Organization may require. The Secretary-General shall be appointed by the General Assembly upon the recommendation of the Security Council. He shall be the chief administrative officer of the Organization.

##### Article 98

The Secretary-General shall act in that capacity in all meetings of the General Assembly, of the Security Council, of the Economic and Social Council, and of the Trusteeship Council, and shall perform such other functions as are entrusted to him by these organs. The Secretary-General shall make an annual report to the General Assembly on the work of the Organization.

##### Article 99

The Secretary-General may bring to the attention of the Security Council any matter which in his opinion may threaten the maintenance of international peace and security.

##### Article 100

1. In the performance of their duties the Secretary-General and the staff shall not seek or receive instructions from any government or from any other authority external to the Organization. They shall

refrain from any action which might reflect on their position as international officials responsible only to the Organization.

2. Each Member of the United Nations undertakes to respect the exclusively international character of the responsibilities of the Secretary-General and the staff and not to seek to influence them in the discharge of their responsibilities.

#### Article 101

1. The staff shall be appointed by the Secretary-General under regulations established by the General Assembly.

2. Appropriate staffs shall be permanently assigned to the Economic and Social Council, the Trusteeship Council, and, as required, to other organs of the United Nations. These staffs shall form a part of the Secretariat.

3. The paramount consideration in the employment of the staff and in the determination of the conditions of service shall be the necessity of securing the highest standards of efficiency, competence, and integrity. Due regard shall be paid to the importance of recruiting the staff on as wide a geographical basis as possible.

### CHAPTER XVI

#### Miscellaneous Provisions

##### Article 102

1. Every treaty and every international agreement entered into by any Member of the United Nations after the present Charter comes into force shall as soon as possible be registered with the Secretariat and published by it.

2. No party to any such treaty or international agreement which has not been registered in accordance with the provisions of paragraph 1 of this Article may invoke that treaty or agreement before any organ of the United Nations.

##### Article 103

In the event of a conflict between the obligations of the Members of the United Nations under the present Charter and their obligations under any other international agreement, their obligations under the present Charter shall prevail.

##### Article 104

The Organization shall enjoy in the territory of each of its Members such legal capacity as may be necessary for the exercise of its functions and the fulfillment of its purposes.

##### Article 105

1. The Organization shall enjoy in the territory of each of its Members such privileges and immunities as are necessary for the fulfillment of its purposes.

2. Representatives of the Members of the United Nations and officials of the Organization shall similarly enjoy such privileges and immunities as are necessary for the independent exercise of their functions in connection with the Organization.

3. The General Assembly may make recommendations with a view to determining the details of the application of paragraphs 1 and 2 of this Article or may propose conventions to the Members of the United Nations for this purpose.

## CHAPTER XVII

### Transitional Security Arrangements

#### Article 106

Pending the coming into force of such special agreements referred to in Article 43 as in the opinion of the Security Council enable it to begin the exercise of its responsibilities under Article 42, the parties to the Four-Nation Declaration, signed at Moscow, October 30, 1943, and France, shall, in accordance with the provisions of paragraph 5 of that Declaration, consult with one another and, as occasion requires with other Members of the United Nations with a view to such joint action on behalf of the Organization as may be necessary for the purpose of maintaining international peace and security.

#### Article 107

Nothing in the present Charter shall invalidate or preclude action, in relation to any state which during the Second World War has been an enemy of any signatory to the present Charter, taken or authorized as a result of that war by the Governments having responsibility for such action.

## CHAPTER XVIII

### Amendments

#### Article 108

Amendments to the present Charter shall come into force for all Members of the United Nations when they have been adopted by a vote of two-thirds of the members of the General Assembly and ratified in accordance with their respective constitutional processes by two-thirds of the Members of the United Nations, including all the permanent members of the Security Council.

#### Article 109

1. A General Conference of the Members of the United Nations for the purpose of reviewing the present Charter may be held at a date and place to be fixed by a two-thirds vote of the members of the General Assembly and by a vote of any seven members of the Security Council. Each Member of the United Nations shall have one vote in the conference.

2. Any alteration of the present Charter recommended by a two-thirds vote of the conference shall take effect when ratified in accordance with their respective constitutional processes by two-thirds of the Members of the United Nations including all the permanent members of the Security Council.

3. If such a conference has not been held before the tenth annual session of the General Assembly following the coming into force of the present Charter, the proposal to call such a conference shall be placed on the agenda of that session of the General Assembly, and the conference shall be held if so decided by a majority vote of the members of the General Assembly and by a vote of any seven members of the Security Council.

## CHAPTER XIX

### Ratification and Signature

#### Article 110

1. The present Charter shall be ratified by the signatory states in accordance with their respective constitutional processes.

2. The ratifications shall be deposited with the Government of the United States of America, which shall notify all the signatory states of each deposit as well as the Secretary-General of the Organization when he has been appointed.

3. The present Charter shall come into force upon the deposit of ratifications by the Republic of China, France, the Union of Soviet Socialist Republics, the United Kingdom of Great Britain and Northern Ireland, and the United States of America, and by a majority of the other signatory states. A protocol of the ratifications deposited shall thereupon be drawn up by the Government of the United States of America which shall communicate copies thereof to all the signatory states.

4. The states signatory to the present Charter which ratify it after it has come into force will become original Members of the United Nations on the date of the deposit of their respective ratifications.

#### Article 111

The present Charter, of which the Chinese, French, Russian, English, and Spanish texts are equally authentic, shall remain deposited in the archives of the Government of the United States of America. Duly certified copies thereof shall be transmitted by that Government to the Governments of the other signatory states.

IN FAITH WHEREOF the representatives of the Governments of the United Nations have signed the present Charter.

DONE at the city of San Francisco the twenty-sixth day of June, one thousand nine hundred and forty-five.



# HEADLINE HISTORY OF OUR TIMES



## CONTENTS

A Quick Look Backward . . . . .	395	Conflicts Preliminary to WW II . . . . .	411
Depression and Recovery . . . . .	400	World War II . . . . .	413
U. S. in World Affairs . . . . .	403	Cold War . . . . .	416
Soviet Russia: 1917-1954 . . . . .	406	Korea . . . . .	419
The Rise of Hitler . . . . .	408	World Peace Organizations . . . . .	421
Atomic Energy . . . . .	423		

## A Quick Look Backward

### *Memories of a Generation*

**J**ust for the sake of contrast with what was to come later, let's take a quick look at that fabulous era—the late 1920s.

It was an era of champions. That young man Lindbergh must be crazy, we thought, when he took off to fly the Atlantic alone. But what a thrill went around the world when *The Spirit of St. Louis* circled into the searchlights of Paris!

There were sports champs we'll never forget. Remember how surprised we were when Gene Tunney—later to become a Shakespearean scholar—knocked the mighty Jack Dempsey off his throne? And all the hoopla when Gertrude Ederle swam the English Channel? Bobby Jones ruled the golf links here and abroad, Big Bill Tilden ruled the tennis courts and Babe Ruth was crowned Sultan of Swat.

Speaking of golf, what ever became of those miniature courses that in the late 20s messed up the landscape from one end of the land to the other? And who plays mah-jongg any more?

There were champs even in the underworld. Al Capone finally got behind the bars, but only on an income-tax charge. And Outlaw John Dillinger was so famous they put songs about him on phonograph records.

Of course, that wondrous thing known as the Noble Experiment helped the underworld to prosper. And millions of us became lawbreakers, mixing dreadful concoctions out of raw alcohol and flavoring drops. Dress suits had big pockets in the tails to accommodate hip flasks.

Radio was just coming into its own in a big way. Sales shot up from \$425 million in 1927 to \$842 million in 1929. In the bookstores, the American Babbitt was pay-

ing out good money for books that kidded the daylights out of him—books by such great champions of yesteryear as Sinclair Lewis, H. L. Mencken and F. Scott Fitzgerald.

### Wasn't Everybody Happy?

Oh, were we a Good-Time Charley nation! And why not? Everybody was going to get rich. Just buy a lot in Florida, hold it a week, and sell it for twice as much. Simple! Or, get in on the Stock Exchange bonanza. Blindfold yourself and pick a stock—any stock—in the spring of 1928, and watch the profits roll in. By the autumn of 1929 you had doubled your money, or tripled it, and in some cases quintupled it.

Paper profits, of course. And you had bought the stocks on margin, of course. But what matter? Prosperity was here forever. Two chickens in every pot. Two cars in every garage. Everybody felt great. Fantastic era. Crazy era.

Came the 24th day of October, 1929. An era blew up in our faces.

Just as the boom had been the champion of all time, so was the crash. Prosperity, instead of being permanent, was soon to be described as "just around the corner." And that prediction was a champion in its way; few have been worse.

The long queues that used to form at movie theaters vanished—and reappeared at banks. Get your money out before it folded! Wall Street brokers were jumping out of 37th-story windows. Apple-sellers were standing despondently on the street corners. Even our songs reflected the misery: "Brother, Can You Spare a Dime?"

### The New Deal

Panic lay heavy on the land when Franklin Delano Roosevelt took office.

"The only thing we have to fear is fear itself," the new President told the nation.

Then came an alphabetical torrent of governmental agencies to try to pull us up by the bootstraps. Can you remember now what these initials stood for: NRA, CCC, WPA, PWA?

Things happened fast. First we got 3.2 beer . . . we recognized Soviet Russia . . . the end of prohibition put the rumrunners out of business.

In this early Roosevelt era, we went to see a movie called *It Happened One Night*, and we read a novel named *Lamb in His Bosom*. We became enthralled by the greatest crime story of the century—the trial and execution of Bruno Richard Hauptmann for the kidnaping and murder of Charles A. Lindbergh's son.

A pleasanter fascination was the birth of quintuplets to the Dionnes in Canada. Those 5 little girls stared at us from Scripps-Howard newspapers and breakfast-food boxes until, eventually, their novelty wore off and we quietly forgot about them.

While we were absorbed in our Depression troubles, we but dimly realized how sinister were the storm clouds building up in the rest of the world. Grim dress rehearsals for World War II were under production in Spain, Ethiopia and Manchuria. Hitler, Mussolini and the militarists of Japan were reveling in dreams of grandeur.

Our fancy was caught, our emotions were stirred, by the abdication of a King of England because he loved an American divorcee, Wallis Simpson. A Calypso record sang to us: "'Twas love and love alone caused King Edward to leave the throne."

Much more important—although how many of us knew it at the time?—was a British umbrella. The umbrella of Brime Minister Chamberlain. He took it to Munich, where he sacrificed Czechoslovakia to Hitler. He brought it home, proclaiming "Peace in our time!" Another wrong prediction.

### Hitler and War

One year later, Nazi Germany plunged the world into war. Many of us in the U. S. were honest isolationists. We wanted to have no part in the war. It seemed a "phony" war, anyway—until Hitler drove the Panzer knife into France.

We had troubles aplenty at home. Automobile workers in Michigan devised a new type of labor warfare—the sit-down strike. They just stayed in the factory.

President Roosevelt tried a new technique, too. Let's pack the Supreme Court, said he, with 15 instead of 9 members. Then the elderly justices couldn't thwart

the New Deal. He did not get his idea across, and blood pressure was raised all over the place.

People calmed down and grew misty-eyed when Kate Smith sang "God Bless America!" There was a play that opened in 1939 and it did right well. Ran until 1947, with 3,224 performances. It was *Life With Father*, which beat the previous all-time record set by *Tobacco Road*, with a mere 3,182 performances.

Radio was a big boy by now, and *Information Please*, which started in 1938, proved that millions of listeners liked a high-brow quiz program.

For soothing reading in these parlous times, we went all the way back to the Civil War and read *Gone With the Wind*. But we didn't blink the Depression entirely, because we also read *The Grapes of Wrath* about the Okies.

The lightning burst out of those storm clouds that had been building abroad. Japan must be crazy, we thought, on that unbelievable Sunday afternoon of Pearl Harbor. Little did we know, that afternoon, how many of our young men would die in places they never before had heard of—Kwajalein, Anzio, Okinawa, Bizerte.

For the whole first year, the news was black. After what seemed to be a long, long time there came the turning points—the Battle of the Coral Sea, the Battle of Stalingrad, the awful suspense of the Normandy invasion.

At home we couldn't drive very far on an "A" gasoline ration card. Nor could we eat too much meat on a red ration coupon. When a store got a few nylon stockings, women stood in lines a block long. Our cigarettes disappeared toward the end of the war, and nobody yet has figured out where they went.

You couldn't buy aluminum porch furniture; but then you shouldn't have been sitting around, anyway. The nation was hard at work, with a unity of spirit that seems wonderful now that we look back.

We began to read war books, starting with Ernest Hemingway's *For Whom the Bell Tolls*. For lighter diversion we saw Bing Crosby in *Going My Way*.

"A massive cerebral hemorrhage." That was what the physicians announced on that spring day of 1945 when Franklin Delano Roosevelt died. The war was not yet quite won. Great decisions were to be made, including the atomic bombing of Japan. Into the Presidency was pitched a man from Missouri, who was at first awed and bewildered—Harry S. Truman.

We looked to the United Nations to usher in an era of everlasting peace. We were blissful, maybe naive. Disillusion was to come all too soon. We found ourselves shipping billions of dollars across the At-

lantic to shore up the dikes of European democracy against communism.

Things weren't too peaceful at home, either. Rarely had labor and management fought on so vast a scale. Involved in strikes in 1946 were 4½ million persons. Truman quarreled with a Republican Congress. Wives quarreled with husbands; 11,000 divorces set a record for Reno in 1946.

### Postwar Turbulence

Prices shot up. Eggs were \$1 a dozen. In this turbulent, uncertain era, no wonder the nonfiction best-seller was Joshua Loth Liebman's *Peace of Mind*. Also doing well was Dale Carnegie with his book *How to Stop Worrying and Start Living*. Among the movies we liked was one about war veterans—*The Best Years of Our Lives*. And one about a sot—*The Lost Weekend*.

The greatest psychological mystery of our time unfolded before our astonished eyes. Whittaker Chambers, an editor of *Time*, accused his erstwhile friend, Alger Hiss, of having slipped him government secrets for Russia in the 1930s when Hiss held a high position in the State Department. In the end, penitentiary doors closed on Hiss, convicted of perjury.

A Red scare already had been sweeping the country. Back in 1938, Representative Martin Dies had thrown suspicion on little Shirley Temple. Maybe she was a Red! Now it was to become a favorite sport for eager-eyed legislators to hunt for Communists in government, schools, movies, and even the clergy.

Bigger Red scares were developing abroad. A 14-word White House announcement broke the news that Russia had exploded an atomic bomb. The "secret" was no longer ours.

### "No Man's Land" Again

Nine months later, the Communists started a shooting war in Korea. We and the United Nations shot back. It was like a nightmare repeating itself when the boys went once more to the battlefield.

As the tides of war shifted, gloom and joy alternately seized the nation. When Truman fired MacArthur, people wept as

the General said: "I now close my military career and just fade away . . ."

Amid all the turmoil, we found time to get excited about radio give-away shows. The \$64 question actually was just a pup. You could get a washing machine, or maybe a trip around the world, if you answered the question: "Who was buried in Grant's Tomb?"

These were the days of the new nylon shirts, some of which popped their buttons.

Television was coming up in the same big way that radio did back in the 1920s. We could look at plunging necklines. We could look at the ugly mugs of the racketeers whom Senator Kefauver brought into our parlor when he was televising the underworld.

The year 1952 was a turning point in several respects.

By now we had recovered from our delicious fright over the Flying Saucers—those eerie aeronautical apparitions that sped through the night skies, undoubtedly piloted either by "teensy little mens" from Mars or else by "gwate big mens" from Russia.

The women were changing their hairdo. The big argument was which looked funnier the horsetail or the poodle.

Chlorophyll—life-giving, breath-killing chlorophyll—was creeping into toothpaste, chewing gum, dog food.

### The Big Change

Politically speaking, 1952 was the end of an era. For almost 20 years the Democrats had reigned. Now the New Deal-Fair Deal had its back to the wall. The word had got around that there was "influence" reaching into high places in Washington—tales of mink coats and deep freezers. The Republican chant went across the land: "It's time for a change!"

Change we did. Into the White House came a General.

End of an era! Looking back on those two decades of depression and war, how better to characterize the era than in the famous phrase of Britain's Winston Churchill: "Blood, toll, tears and sweat."

### 1933

Jan. 30—Hitler made Chancellor of Germany by Hindenburg.

Feb. 15—FDR misses assassination at Miami; Mayor Cermak of Chicago fatally wounded.

Mar. 4—FDR inaugurated President.

Oct. 17—Einstein arrives in U. S. from Germany.

Nov. 17—U. S. and Russia resume full relations.

Dec. 5—Prohibition ends in U. S.

### 1934

May 28—Dionne quintuplets born.

Aug. 2—Hitler becomes absolute dictator of Germany.

Aug. 12—Dept. of Agriculture declares current drought sets record.



- Aug. 31*—Huey Long enters New Orleans with troops to ferret out enemies.
- 1935**  
*June 14*—Samuel Insull, in 3rd and final acquittal, is cleared of charges of bankruptcy-law violation.  
*Sept. 10*—Huey Long dies from being shot Sept. 8.  
*Oct. 3*—Italy invades Ethiopia.
- 1936**  
*Jan. 20*—George V dies; Prince of Wales becomes Edward VIII.  
*Apr. 3*—Bruno Richard Hauptmann electrocuted for kidnap-slaying of Lindbergh baby.  
*May 9*—Ethiopia annexed to Italy.  
*July 17*—Civil war begins in Spain.  
*Nov. 3*—FDR re-elected President.  
*Dec. 11*—Edward VIII abdicates; his brother becomes George VI.
- 1937**  
*Feb. 5*—FDR asks power to enlarge Supreme Court to maximum of 15 justices; plan defeated by Senate July 22.  
*May 6*—German zeppelin *Hindenburg* burns at Lakehurst, N. J.  
*May 12*—Coronation of George VI.  
*May 28*—Chamberlain succeeds Baldwin as British Prime Minister.  
*July 2*—Amelia Earhart Putnam missing in Pacific in round-the-world flight.  
*July 7*—Japan begins undeclared war on China.
- 1938**  
*Feb. 20*—Eden resigns as British Foreign Minister; charges Chamberlain "seeks to buy peace."  
*Mar. 12*—Nazis seize Austria.  
*July 18*—Douglas Corrigan lands in Dublin in "wrong way" flight.  
*Sept. 29-30*—Munich parley agrees to dismember Czechoslovakia.  
*Oct. 30*—"Attack from Mars" radio program by Orson Welles causes panic.
- 1939**  
*Feb. 27*—Sit-down strikes outlawed by U. S. Supreme Court.  
*Mar. 12*—Pope Pius XII begins reign.  
*Apr. 1*—Civil war ends in Spain.  
*Apr. 7*—Italy invades Albania.  
*Apr. 30*—New York World's Fair opens.  
*Aug. 24*—Germany and Russia sign 10-year nonaggression pact.  
*Sept. 1*—World War II begins as Germany attacks Poland.  
*Nov. 30*—Russia attacks Finland.
- 1940**  
*May 10*—Churchill Prime Minister.  
*May 26-June 3*—Dunkirk evacuation of Allied troops from Belgium.  
*June 22*—France surrenders to Germany.  
*Aug. 21*—Trotsky assassinated in Mexico City.
- Nov. 5*—FDR re-elected President.
- 1941**  
*June 2*—Lou Gehrig dies of spinal paralysis.  
*June 22*—Hitler attacks Russia.  
*Aug. 14*—Atlantic Charter: FDR and Churchill agree on war aims.  
*Dec. 7*—Japan attacks Pearl Harbor.
- 1942**  
*Jan. 5*—Consumer rationing begins in U. S. as auto tires are rationed.  
*Jan. 30*—FDR signs price-control legislation.
- 1943**  
*Feb. 1-2*—War turns in Russia as German 6th Army is destroyed at Stalingrad.  
*Mar. 3*—Gandhi ends 3-week fast in India against detention by British.  
*June 20-21*—Detroit race riots; 34 die.  
*July 25*—Mussolini deposed; killed at Lake Como Apr. 28, 1945.  
*Sept. 8*—Italy surrenders unconditionally.
- 1944**  
*June 6*—D-Day: Allies land in France.  
*July 20*—Hitler wounded in bomb plot.  
*Aug. 25*—Paris liberated.  
*Nov. 7*—FDR re-elected President.
- 1945**  
*Apr. 12*—FDR dies; Truman is President.  
*May 7*—Germany surrenders.  
*July 26*—Attlee Prime Minister; Churchill is out.  
*Aug. 6*—A-bomb blasts Hiroshima.  
*Aug. 14*—Japan surrenders.  
*Oct. 24*—U. N. officially established.
- 1946**  
*Jan. 10*—Moon hit with radar.  
*June 3*—Italy votes to abolish monarchy.  
*Sept. 20*—Truman fires Wallace from Cabinet.  
*Nov. 9*—Truman ends nearly all price and wage controls; prices soar.  
*Dec. 19*—Fighting breaks out in Indo-China between French and Reds.
- 1947**  
*Jan. 1*—Britain inaugurates socialism as coal mines are nationalized.  
*June 5*—Marshall Plan proposed.  
*July 18*—Exodus 1947, carrying unauthorized immigrants bound for Palestine, seized by British.  
*Aug. 15*—India freed by Britain.  
*Nov. 20*—Princess Elizabeth married to Lt. Philip Mountbatten.  
*Dec. 5*—10 Hollywood writers and executives who refused to say if they are Communists are indicted for contempt of Congress.
- 1948**  
*Jan. 30*—Gandhi assassinated.  
*Feb. 23-25*—Communists seize power in

Czechoslovakia; Jan Masaryk plunges to death Mar. 10.

May 15—British end mandate over Palestine; Arab-Israeli war begins.

June 9—Truman says 80th Congress is worst in U. S. history.

June 21—Berlin airlift begins; ends May 12, 1949.

June 28—Stalin and Tito break.

July 5—Britain provides free medical service for all requesting it.

Sept. 6—Juliana Queen of Netherlands.

Nov. 2—Truman elected President.

## 1949

Jan. 7—Cease-fire in Palestine.

Jan. 20—Truman proposes Point 4 Program to help world's backward areas.

Feb. 8—Cardinal Mindszenty sentenced in Hungary to life imprisonment.

Apr. 4—Start of NATO; treaty signed by 12 nations.

Apr. 18—Ireland cuts last ties with Britain.

Sept. 21—German Federal Republic (West Germany) established.

Sept. 24—Truman discloses Russia has set off atomic explosion.

Oct. 14—11 top Communist leaders in U. S. found guilty of advocating overthrow of government.

Dec. 8—Nationalist Chinese government moves to Formosa.

## 1950

Jan. 21—Alger Hiss convicted of perjury in denying he gave U. S. secrets to Whittaker Chambers for Communists.

Jan. 31—Truman orders development of hydrogen bomb.

Feb. 11—Sen. Joseph R. McCarthy (R, Wis.) says 57 Communists are working in State Dept.

Mar. 1—Britain sentences Dr. Klaus Fuchs to 14 years in prison for giving atomic secrets to Russia.

June 5—U. S. Supreme Court bars segregation of Negroes in 2 southern universities and on railroad dining cars.

June 25—Korean war begins.

Aug. 31—N. Y. Mayor William O'Dwyer quits; to be Ambassador to Mexico.

Nov. 26—Massive Chinese offensive in Korea hurls U. N. forces back.

Dec. 5—U. S. Court of Appeals reverses Judith Coplon's conviction for espionage of Mar. 7, 1950; arrest without warrant was illegal.

## 1951

Mar. 12-21—Senate Crime Investigating Comm. headed by Kefauver holds hearings in New York City.

Apr. 5—Julius and Ethel Rosenberg sentenced to death as atom spies.

Apr. 11—Truman dismisses Gen. MacArthur from Far East commands.

Apr. 22—British Labour party split as Aneurin Bevan resigns from Cabinet.

Apr. 28—Robert A. Vogeler, Jr., released by Hungary after 17 months in prison for alleged spying.

July 10—Truce talks begin in Korea.

Aug. 3—West Point dismisses 90 cadets, including most of football team, for cheating in exams.

Sept. 8—Japanese peace treaty signed in San Francisco by 49 nations.

Oct. 26—Churchill again Prime Minister.

## 1952

Jan. 10—Flying Enterprise sinks; Capt. Carlsen rescued after lone attempt to save freighter.

Feb. 6—George VI dies; his daughter becomes Elizabeth II.

Mar. 29—Truman will not run again.

Apr. 4—Gambler Frank Costello guilty of contempt of Kefauver Comm.; sentenced to 18 months in prison.

May 29—Truman vetoes bill to give offshore oil rights to states.

June 27—Congress overrides Truman veto of McCarran-Walter immigration bill.

Sept. 19—U. S. bars Charles Chaplin from re-entering U. S. after trip abroad.

Oct. 3—Britain sets off atomic explosion near Australia.

Nov. 4—Eisenhower elected President.

## 1953

Feb. 3-13 "2nd string" U. S. Communist leaders sentenced to prison.

Feb. 4—William W. Remington sentenced to 3 years for perjury in denying he passed secret data to a Communist.

Feb. 6—All wage controls and many price controls end.

Mar. 5—Stalin dies; Malenkov is Premier of Russia Mar. 7.

Mar. 12—All price controls on consumer goods end.

Apr. 24—Churchill knighted.

May 29—Mt. Everest climbed by British expedition.

June 2—Coronation of Elizabeth II.

June 19—Rosenbergs executed.

July 27—Korean armistice signed.

July 31—Sen. Robert A. Taft dies.

Aug. 20—Moscow announces explosion of hydrogen "device."

Sept. 30—Warren named Chief Justice.

Oct. 7—Robert Greenlease, Jr., 6, found dead in St. Joseph, Mo.; kidnapers executed Dec. 18.

Dec. 23—Beria executed in Russia.

(For later items, see News Record of 1954)

## Depression and Recovery

**W**ITH the middle of 1915, a war boom began to develop in the U. S.; it continued until the middle of 1920. There was a brief postwar recession; and then, in the spring of 1922, prosperity once more appeared. Americans were convinced it was to be everlasting. Unemployment dropped; wages went up; corporate profits began to mount; and the purchasing capacity of the American people to absorb new durable consumer goods became the wonder of the world.

The important factors for this unparalleled prosperity were these: (1) construction led to a great building boom which provided almost 5 million new jobs; (2) the expansion of the automobile industry had widening effects on employment and profits; (3) there was new public investment in highways, schools and hospitals; (4) there was a vast expansion of the utility industries, particularly in the production of electric light and power (during the 1920s America's electric power capacity was doubled); (5) foreign trade revived.

In the face of all this, there were structural weaknesses in the economy, so that the collapse of 1929 really was inevitable. Agriculture was in depression, as were the coal and cotton-textile industries. Our

high tariffs kept out foreign goods, so that Europeans and others could not sell to us or pay interest on American-owned foreign securities. The result was simply a compounding of debt. Prices—because of the great advances in productivity—should have dropped and real wages should have risen. Neither occurred; therefore, a profit inflation was actually taking place.

Two consequences followed. First, business profits moved into securities speculation, and here prices soared. Second, a great credit expansion also developed, particularly on the part of consumers. Through installment purchasing they were able to acquire new durable consumer goods; also, on credit, to buy stocks, bonds, and real estate. Nor did businessmen and corporations find the processes of going into debt any hardship. This credit inflation, in its turn, encouraged overexpansion of business enterprise.

On all this, Washington smiled, giving its approval to the boom and failing to apply brakes to speculation. As normal opportunities for investment dwindled, the stock market increasingly attracted idle funds and the gamblers. And so we went on into 1929—and to the stock market collapse of October 1929, which ushered in a recession lasting a decade.

### 1929

*Feb. 7*—Federal Reserve Board warns member banks that loans for speculation are excessive.

*May 27*—Wheat falls below \$1 for 1st time since 1915.

*June 15*—Agricultural Marketing Act establishes Board to buy surpluses.

*June 30*—U. S. government fiscal year closes with surplus of \$185 million.

*Aug. 8*—Federal Reserve raises rediscount rate to 6% in effort to curb speculative loans.

*Oct. 3*—Unprecedented smashing of prices on N. Y. Stock Exchange.

*Oct. 24*—Worst stock crash wipes out thousands of accounts.

*Oct. 29*—Stock market collapses; 16,410,030 shares of stock sold.

*Oct. 31*—Federal Reserve reduces rediscount rate to 5% to ease money situation; to 4½% Nov. 14.

*Dec. 31*—Secy. of Treasury Mellon sees no cause for pessimism.

### 1930

*June 17*—Smoot-Hawley Tariff signed; 50-100% increase over 1922 schedules; 25 countries retaliate by end of 1931.

### 1931

*Jan. 2*—Secy. of Commerce Robert P.

Lamont reports Federal Reserve index of production for 1930 shows fall of 20%; exports decline 25% in value.

*July 31*—Wheat falls to 48¢.

*Sept. 11*—Value of farm crops drops 22% since last year.

*Dec. 23*—War Debt Moratorium signed.

### 1932

*Jan. 22*—Reconstruction Finance Corporation (RFC) established.

*Mar. 23*—Norris-La Guardia Anti-Injunction Law passed; makes yellow-dog contracts unenforceable.

*June 7*—Thousands of unemployed veterans seek bonuses in Washington.

*July 2*—Franklin D. Roosevelt promises New Deal in acceptance speech.

*Oct. 31*—Hoover warns "grass will grow in streets" under New Deal.

*Oct. 31*—Nevada declares 12-day bank holiday to aid cattlemen.

*Dec. 22*—Incomes of over \$1 million fell from 513 in 1929 to 75 in 1931.

### 1933

*Mar. 4*—Gov. Lehman of New York orders bank holiday.

*Mar. 4*—Roosevelt inaugurated.

*Mar. 6*—Roosevelt proclaims bank holiday; embargoes gold.

*Mar. 12*—FDR's first "Fireside Chat."



- Mar. 15**—Stock Exchange reopens.
- Mar. 31**—Civilian Conservation Corps (CCC) to relieve unemployment and aid reforestation and flood control.
- Apr. 19**—U. S. goes off gold standard.
- May 12**—Agricultural Adjustment Act (AAA) signed. Declared unconstitutional Jan. 6, 1936.
- May 18**—Tennessee Valley Authority (TVA) established.
- May 27**—Federal Securities Act signed; requires registration and approval of stock and bond issues.
- June 5**—Gold Repeal Joint Resolution cancels gold clause in government and private contracts.
- June 13**—Home Owners Loan Corporation established to refinance mortgaged homes.
- June 16**—Glass-Steagall Act creates Federal Deposit Insurance Corporation to safeguard deposits up to \$5,000.
- June 16**—National Industrial Recovery Act (NIRA) signed. Declared unconstitutional May 27, 1935.
- July 20**—Voluntary blanket industrial code (under NIRA) sets industrial wages at minimum of 40¢ per hour.

# 1934

- Jan. 30**—Gold Reserve Act signed; gives President right to devalue gold and impound all gold in Federal system.
- Jan. 31**—Federal Farm Mortgage Corporation created to assist farmers by establishing easier mortgage terms.
- Jan. 31**—Gold value of dollar cut to \$.5906.
- June 6**—Securities and Exchange Act signed; regulates licensing of stock exchanges and speculative practices.
- June 12**—Reciprocal Trade Agreements Act signed; allows President limited trade-agreement authority without need for Senatorial approval.
- June 19**—Federal Communications Commission (FCC) created to regulate interstate telegraph, telephone, cable and radio.
- June 28**—Federal Housing Administration (FHA) to aid in modernizing homes and in new construction.

**Aug. 9**—U. S. nationalizes silver.

# 1935

- Jan. 4**—Roosevelt asks 3.5 million jobs in public works (PWA) to end ole.
- Mar. 6**—22.375 million on relief rolls.
- July 5**—Wagner-Connery Act establishes National Labor Relations Board (NLRB). Upheld by Supreme Court Apr. 12, 1937.
- Aug. 14**—Social Security Act signed; establishes old-age benefits and unemployment insurance. Upheld by Supreme Court May 24, 1937.
- Aug. 23**—Banking Act of 1935 increases power of Federal Reserve Board over open market and credit transactions.
- Aug. 26**—Wheeler-Rayburn Act limits public-utility holding companies.
- Aug. 29**—Farm Mortgage Moratorium Act allows 3-year moratorium on foreclosures with court permission.
- Nov. 9**—Committee for Industrial Organization, headed by John L. Lewis, organized within AFL; expelled in 1937; becomes Congress of Industrial Organizations (CIO) in Nov. 1938.

# 1936

- Feb. 17**—TVA wins 1st test of constitutionality as Supreme Court rules Wilson Dam can sell power.
- Mar. 1**—Soil Conservation and Domestic Allotment Act signed; grants payments to farmers who convert from surplus soil-depleting to soil-covering crops.
- June 27**—FDR in acceptance speech condemns "economic royalists."

# 1937

- Jan. 20**—FDR inaugural sees "one-third of the nation ill-housed, ill-clad, ill-nourished."
- Feb. 2**—Sit-down strikers at Flint, Mich., defy court order to evacuate.
- Mar. 2**—Steel plants raise wages to \$5 per day; grant 40-hour week.
- Mar. 29**—Supreme Court backs Washington State Minimum Wage Act for Women.
- Sept. 1**—U. S. Housing Authority established to administer loans to local



and state communities for construction.

## 1938

*Feb. 16*—New Agricultural Adjustment Act signed; establishes parity payments, ever-normal granaries, crop insurance.

*June 25*—Fair Labor Standards Act provides 40¢ minimum wage and 40-hour week, to be achieved within 8 and 3 years, respectively.

## 1939

*Feb. 27*—Sit-down strikes outlawed by Supreme Court.

*Mar. 7*—UAW secedes from CIO.

*June 1*—Townsend old-age pension plan defeated in House.

## 1940

*May 28*—Council of National Defense established to co-ordinate industry transportation, finance and labor.

*Dec. 29*—FDR announces that U. S. is "Arsenal of Democracy."

## 1941

*Jan. 7*—FDR establishes Office of Production Management (OPM).

*May 1*—Defense bonds and stamps go on sale.

*Nov. 14*—FDR tells UMW that U. S. will not force closed shop.

*Dec. 27*—OPM orders rationing of auto tires (effective Jan. 5, 1942).

## 1942

*Jan. 7*—\$4-billion program instituted for increased production of synthetic rubber.

*Jan. 12*—National War Labor Board (NWLB) set up to handle disputes in war industries.

*Jan. 16*—War Production Board (WPB) established to mobilize nation's war efforts; terminated Oct. 4, 1945; functions assumed by Civilian Production Administration.

*Jan. 30*—Office of Price Administration (OPA) established to fix price ceilings on all commodities and on rents; replaces original OPA of Apr. 11, 1941.

*May 6*—Sugar rationing begins.

*Oct. 3*—FDR freezes rents, wages, farm prices.

*Nov. 29*—Coffee rationing begins.

*Dec. 1*—Gasoline rationing begins.

## 1943

*Mar. 26*—War Food Administration created.

*Mar. 29*—Rationing of meats, butter, cheese, canned fish, edible oils begins.

*Apr. 8*—FDR issues hold-the-line order to prevent wage or price rises.

*Apr. 17*—WMC to "freeze" 27 million workers to war jobs.

*May 1*—FDR orders government seizure of coal mines because of strikes, for which he holds John L. Lewis responsible; truce called by Lewis May 2.

*June 10*—FDR signs withholding tax.

*June 25*—War Labor Disputes Act (Smith-Connally Anti-Strike Act) passed over FDR's veto.

*Dec. 27*—Army takes over railroads to avoid strikes; returned to owners Jan. 18, 1944.

## 1944

*Apr. 26*—U. S. troops seize Chicago plant of Montgomery Ward & Co. in dispute between management and CIO.

*Dec. 23*—Government to ban horse racing indefinitely to save labor and critical materials.

## 1945

*Aug. 4*—1st foodstuffs freed from rationing; autos freed Jan. 1, 1946.

## 1946

*Jan. 25*—AFL readmits UMW.

*Apr. 1*—400,000 soft-coal miners strike; mines seized by government May 21; strike ends May 29 as union signs contract with government.

*May 17*—Truman seizes railroads in face of strike threat.

*Nov. 9*—Truman ends all price and wage controls, except on rent, sugar and rice.

*Nov. 21-Dec. 7*—Soft-coal miners strike again.

*Dec. 4*—Judge Goldsborough fines John L. Lewis \$10,000 and UMW \$3.5 million for contempt in disobeying court order.

## 1947

*Mar. 6*—UMW fine reduced to \$700,000 by Supreme Court.

*Apr. 14*—General Motors settles wage dispute with United Electrical Workers (CIO) with increase equivalent to 15¢ per hour; sets pattern.

*June 11*—Freeing of sugar, except for industrial uses, ends rationing.

*June 23*—Taft-Hartley Labor-Management Relations Act passed over Truman's veto.

*July 8*—Soft-coal mines returned to owners; UMW wins equivalent of 44⅓¢-an-hour boost.

*Dec. 12*—John L. Lewis announces withdrawal of UMW from AFL.

## 1948

*Apr. 20*—Federal Court fines John L. Lewis \$20,000 and UMW \$1.4 million for criminal contempt for failure to call off strike within week, as ordered by Court.

*May 25*—General Motors grants 11¢ hourly wage increase to UAW; wages to move up or down according to living costs.

## 1949

*June 30*—Senate defeats Truman's drive to have Taft-Hartley Act repealed.

*July 15*—Housing and Slum Clearance Law provides for 810,000 dwelling units in 6 years.

- Oct. 26—Minimum hourly wage raised by law to 75¢.
- 1950
- May 23—UAW signs with General Motors; pledges 5 years without strikes; pensions and raises granted.
- Aug. 25—Army seizes railroads to avert nation-wide strike.
- Aug. 28—Social Security Law increases contribution to be paid by employer and employee after 1954.
- 1951
- Jan. 18—Soft-coal miners get \$1.60-per-day boost.
- Jan. 26—Hard-coal miners get boost.
- Jan. 26—U. S. freezes most wages as of Jan. 25; most prices as of highest point between Dec. 19-Jan. 25.
- Feb. 1—Rail strike spreads to 30 cities; Truman Feb. 8 orders strikers fired unless they return by Feb. 10; they do.
- Feb. 27—Government limits wage raises to 10% over level of Jan. 15, 1950.
- Mar. 2—Cost of living at record high; million workers to get escalator pay raises.
- Mar. 5—General Motors reports \$834,004,039 profit for 1950 (world record).
- May 21—Supreme Court upsets "fair trade" price-fixing laws in 45 states.
- Aug. 30—Truman invokes Taft-Hartley Act against copper strike.
- 1952
- Apr. 8—Truman seizes steel industry to prevent nation-wide strike.
- Apr. 29—Federal Judge David A. Pine invalidates Truman's seizure of steel mills; USW goes on strike to May 2.
- May 7—U. S. abolishes controls on installment buying.
- May 21—3-year labor dispute ends as railroads accept government-suggested wage compromise; railroads returned to owners May 23.
- May 29—Truman vetoes bill to give offshore oil rights to states.
- June 2—Supreme Court (6-3) rules Truman's seizure of steel mills unconstitutional; mills returned to owners; USW goes on strike to July 24.
- July 14—Truman signs "fair trade" bill, restoring right of manufacturers to set prices of brand products in 45 states.
- July 18—Social Security benefits increased; more persons covered.
- Sept. 15—U. S. removes credit curbs on housing.
- Oct. 18—Wage Stabilization Board cuts to \$1.50 per day the \$1.90 per day increase granted to mine workers; miners stop work Oct. 20; return Oct. 27 after Lewis-Truman talk.
- Dec. 3—Truman overrules WSB; gives miners full \$1.90-per-day increase.
- 1953
- Feb. 3—Eisenhower will let wage and price controls expire Apr. 30.
- May 22—Eisenhower signs Off-Shore Oil Law, giving states rights to all minerals in submerged lands within their boundaries.
- June 12—U. S. Steel grants 8½¢ wage rise without strike.
- July 1—U. S. deficit of \$9,389,083,669 sets peacetime record.
- July 25—New York City boosts subway fare to 15¢.
- Aug. 1—Senate Finance Comm. shelves Eisenhower's urgent request to raise national-debt limit to \$290,000,000,000. (For later items, see News Record of 1954)

## U. S. in World Affairs

### America Becomes a World Power

**I**SOLATION is never fully a reality; for the United States has always participated in world affairs. The assumption of responsibility is another matter, particularly when a country is powerful economically. From the end of World War I to 1936, America denied its responsibilities: by refusing to join the League of Nations and the World Court, by raising high barriers to the entrance of foreign goods, by failing to forgive interallied debts incurred during the war in a common cause. Even when depression hit, America assumed it could go it alone; in fact, programs for reform and recovery did not link our efforts with those of the outside world, notably as regards currency convertibility

and the reopening of world trading channels.

The United States took alarm with 1936 and after: Hitler, Spain, Ethiopia, Manchuria—these demonstrated that the dis-ordering of the peace anywhere was of vital concern to the safety of America. We strengthened our relations with the Latin-American nations, abandoned "neutrality" as an official position, began to give attention to the Navy's needs. When France fell in 1940 we saw that America really was in peril. From thence on, events marched swiftly as the United States stood by Britain and its allies, entered the war itself, and was a prime architect in build-



ing and defending the United Nations, the International Bank and the International Monetary Fund, and in leading the fight against communism.

- 1918**  
*Jan. 8*—Wilson's 14-point address to Congress calls for self-determination, removal of economic barriers, League of Nations.
- 1920**  
*Mar. 19*—Senate finally rejects Treaty of Versailles because of League of Nations proviso.
- 1922**  
*Feb. 6*—Washington Conference guarantees China's integrity in 9-Power Treaty; establishes naval ratios of 5:5:3 for U. S., Britain and Japan.  
*Sept. 21*—Fordney-McCumber Tariff sets highest rates in American history.
- 1924**  
*May 26*—Immigration quotas set: annual immigrants from each nation to be 2% of persons of that nationality residing in U. S. in 1890.
- 1928**  
*Aug. 27*—Kellogg-Briand Pact signed; 15 nations (eventually 62) outlaw war; ratified by Senate Jan. 15, 1929.
- 1930**  
*Apr. 22*—London naval pact signed by U. S., Britain, France, Italy, Japan; Japan benefits by revision of naval ratio.
- 1931**  
*July 6*—1-year moratorium on all payments of intergovernmental debts goes into effect.
- 1932**  
*Jan. 7*—Stimson Doctrine: U. S. will not recognize gains achieved by armed force; recognition of Manchukuo withheld.  
*Jan. 28*—U. S. warns Japan not to imperil foreign interests in Shanghai.
- 1933**  
*Mar. 4*—FDR speech calls for good-neighbor policy.  
*May 16*—FDR calls for world nonaggression pact and disarmament.  
*May 17*—Hitler says Germany is disarmed; will forego arms if other nations reduce to that level.  
*June 12-July 27*—London Economic Conference attempts to stabilize currencies; defeated by FDR's opposition.  
*Nov. 16*—U. S. and Russia resume full relations at 11:50 P.M. EST; Russia to "refrain from propaganda against the policies or social order of the U. S."
- We were the world's leading power, whether we liked it or not. Now, for the first time, we were carrying the burdens that went with wealth.
- 1934**  
*Mar. 24*—FDR signs Tydings-McDuffie Act, giving Philippines independence on July 4, 1946.  
*Apr. 13*—Johnson Debt Default Act forbids nations defaulting on World War I debts from floating loans in U. S.  
*Apr. 30*—U. S. rejects Japanese claim of guardianship over China.  
*May 29*—Platt Amendment of 1901, which gave U. S. right to intervene in Cuba, abrogated.  
*June 12*—Trade Agreement Act passed; provides for reciprocity.  
*Dec. 29*—Japan formally denounces 1922 Washington Naval Treaty.
- 1935**  
*Jan. 29*—Senate rejects World Court.  
*Aug. 31*—Neutrality Act, resulting from Ethiopian crisis, requires President to ban arms sales to nations he declares at war.
- 1936**  
*Jan. 15*—Japan withdraws from naval conference at London; U. S., France, Britain sign pact Mar. 25.  
*Dec. 1-23*—Buenos Aires conference: 21 American republics pledge to consult if peace is imperiled; no nation to interfere with another's domestic affairs.
- 1937**  
*May 1*—Neutrality Act further limits sales to belligerents.  
*Oct. 5*—FDR delivers speech calling for "quarantine" of aggressors.  
*Dec. 25*—U. S. accepts Japanese apology for sinking of U. S. gunboat *Panay* by Japanese planes Dec. 12.
- 1938**  
*Jan. 28*—FDR urges additional national-defense program estimated at \$800,000,000; Navy to be greatly enlarged.  
*Mar. 18*—Mexico expropriates foreign oil properties; Mexico agrees (Nov. 12) to pay for oil and land seizures.  
*Sept. 26*—FDR sends peace plea to Hitler and Czechs.  
*Nov. 18*—Hitler recalls German ambassador to U. S. to report on American anti-Nazi attitude.  
*Dec. 24*—Declaration of Lima expresses determination of Pan-American Union to defend itself against foreign intervention.
- 1939**  
*Apr. 1*—U. S. recognizes Franco Spain.  
*Apr. 28*—Hitler rebuffs FDR's peace plea in Polish quarrel.

July 26—U. S. denounces trade treaty with Japan; treaty expires Jan. 26, 1940.

Aug. 25—FDR again appeals to Hitler in Polish dispute.

Sept. 5—U. S. proclaims neutrality.

Sept. 23—Pan-American conference on neutrality meets in Panamá City; Declaration of Panamá (Oct. 2) proclaims 300-mile safety belt around Americas (except Canada and European possessions).

Oct. 2—U. S. will continue relations with Polish government-in-exile.

Oct. 18—U. S. closes its waters to belligerent submarines.

Nov. 4—FDR signs bill removing arms embargo; substitutes "cash and carry" trade with belligerents.

Dec. 1—FDR denounces invasion of Finland by Russia as "wanton flaunting of law."

Dec. 10—U. S. lends Finland \$10 million.

## 1940

Jan. 3—FDR hopes to keep U. S. at peace; urges taxes for emergency defense.

May 16—FDR asks \$1.8 billion for defense, 50,000 planes.

July 30—Pan-American conference at Havana approves plans for dealing with European possessions in Western Hemisphere.

Aug. 18—U. S. and Canada establish joint defense plan.

Sept. 3—U. S. trades 50 over-age destroyers to Britain in return for right to lease sites for 8 naval bases in British possessions.

Sept. 16—Selective Service Bill signed; over 16,000,000 register Oct. 16.

Oct. 18—FDR signs bill requiring registration of all foreign controlled agents or organizations.

Dec. 29—FDR calls for all aid to Britain short of war; declares U. S. "Arsenal of Democracy."

## 1941

Mar. 11—FDR signs Lend-Lease Bill.

Apr. 10—Denmark gives U. S. right to build bases on Greenland.

May 27—FDR proclaims unlimited emergency.

June 14—U. S. freezes assets of Germany, Italy and Axis-occupied countries.

June 24—U. S. pledges all possible aid to U.S.S.R.

July 7—U. S. occupies Iceland bases to supplement British troops.

July 25—FDR freezes Japanese assets in U. S.; trade ties with Japan virtually severed.

Aug. 14—FDR and Churchill announce

agreement on war aims and future hopes in Atlantic Charter.

Sept. 4—U. S. destroyer *Greer* attacked by Nazi sub; fights back.

Sept. 11—FDR orders Navy to "shoot first" if Nazi raiders enter U. S. zone; Germans threaten countermeasures.

Oct. 17—U. S. destroyer *Kearny* torpedoed off Iceland; 11 lost.

Oct. 30—U-boat sinks U. S. destroyer *Reuben James* off Iceland; about 100 lost.

Nov. 15—Saburo Kurusu, Japanese peace envoy, arrives in Washington.

Nov. 26—Hull presents proposals to envoys Kurusu and Nomura for readjusting U. S.-Japanese relations.

Dec. 7—Japan attacks Pearl Harbor, Philippines, Guam, forcing U. S. into war Dec. 8; Pacific Fleet crippled.

Dec. 11—Germany and Italy declare war on U. S.

(For further events relating to

U. S. foreign affairs 1941-45, see World War II.)

## 1942

Jan. 28-21 American nations, at Rio de Janeiro, call for severance of all ties with Axis.

## 1943

Jan. 14-24—Casablanca Conference: Churchill and FDR agree on unconditional-surrender goal.

Oct. 19-Nov. 1—Moscow Conference: Hull, Eden, Molotov pledge unity to win war and establish world organization; promise democratic Italy and free Austria.

Nov. 22-26—Cairo Conference: FDR, Churchill, Chiang Kai-shek pledge defeat of Japan, free Korea.

## 1945

Feb. 11—Yalta Agreement signed by FDR, Churchill and Stalin.

July 17—Churchill, Truman and Stalin meet at Potsdam for last war conference.

Aug. 2—Potsdam parley agrees on German reparations and peace preliminaries.

Nov. 15—Truman, Attlee and Mackenzie King decide in Washington Conference that atom-bomb secrets will not be shared until U. N. adopts control plan.

Dec. 27—Moscow Conference, attended by Byrnes, Molotov and Bevin, makes preliminary plans for atomic-energy control, peace treaties and Korea.

## 1946

Apr. 29—U. S. proposes treaty with Britain, Russia and France to keep Germany disarmed 25 years; Russia cool to idea.

July 29—Britain accepts U. S. proposal for economic co-operation between their German occupation zones.

1947

Mar. 12—Truman asks funds to help Greece and Turkey resist communism.

June 5—Secy. of State Marshall proposes economic aid to speed European recovery (Marshall Plan).

Sept. 2—19 American nations sign

Treaty of Rio de Janeiro; promise to help each other in case of aggression.

1949

Jan. 20—Truman's inaugural address proposes technical and financial aid to backward areas of world (Point 4 Program).

## Soviet Russia: 1917-1954

WHEN the U.S.S.R. was established, many throughout the world were ready to hail it as the first socialist commonwealth and to watch its initial efforts with sympathy. But from social revolution—in which despotism of the Tsar was overthrown—Russia moved to dictatorship by a small party clique; and to the suppression of its farming populations, the establishment of forced labor camps, the curbing of dissident opinion in every sector. Purges became a common device for compelling compliance. In foreign affairs, the U.S.S.R. became one of the most aggressive nations in the world, expanding at

the expense of Poland and China and surrounding itself with subservient satellite peoples. Seemingly a member of the U.N. and therefore committed to the maintenance of peace, the U.S.S.R. directly or through its agents was fomenting disorders throughout most of the Asian and a good part of the European continents. Its hand was suspected in the Guatemalan government (overthrown June 1954) in the Western Hemisphere. Russia's history since 1917 indicates that Utopias are hard, if not impossible, to realize; and that oppression in the name of the "people" can be as bitter as the worst days of Byzantine absolutism.

1917

Mar. 8—Strikes and riots mark beginning of Revolution in Petrograd.

Mar. 11—Duma refuses to disperse on Tsar's decree.

Mar. 12—New provisional government headed by Prince Lvov (Constitutional Democrat).

Mar. 15—Tsar Nicholas II abdicates.

Apr. 16—Lenin and other exiled Bolshevik leaders arrive in Petrograd from Switzerland; were allowed to pass through Germany in sealed railroad car.

July 20—Kerensky (Social Revolutionary) replaces Lvov.

Nov. 6-7—Bolsheviks overthrow Kerensky, seize power.

Nov. 7—Land decree confiscates large estates and distributes land among peasants; all land nationalized Feb. 19, 1918.

Nov. 7—All banks nationalized; national debt repudiated Jan. 28, 1918.

Nov. 28—Workmen given control over factories; factories nationalized June 28, 1918.

Dec. 17—Church property confiscated; religious instruction abolished; only civil marriages recognized.

1918

Mar. 3—Russia makes separate treaty with Central Powers at Brest-Litovsk.

Mar. 9—Capital moved to Moscow.

July 16—Nicholas II and family shot.

1918-1920—Civil wars, abetted by Allied invasions in White Russia, Ukraine, Don Basin, Caucasus and Siberia.

1919

Mar. 2—3rd International founded.

1920

Apr. 25—War with Poland begins. Treaty of Riga, Mar. 18, 1921, establishes Polish-Russian border.

1921

Mar. 17—New Economic Policy (NEP) permits private enterprise on small scale; small private farms, limited hired labor and leases permitted 1922.

1922

Apr. 16—Treaty of Rapallo provides for economic co-operation between Germany and Russia.

Dec. 30—Union of Soviet Socialist Republics organized as federation.

1924

Jan. 21—Lenin dies; struggle for power begins between Stalin and Trotsky.

Feb. 1—Soviet government recognized by Britain; by Italy Feb. 7; by France Oct. 28.

1926

Oct.—Politburo ousts Trotsky.

1927

Nov.—Trotsky expelled from Communist party; exiled to Turkestan 1928; banished from country 1929.



1928

Oct. 1—1st 5-Year Plan begins; 80% of farms collectivized by Dec. 1932; heavy industry developed. Other 5-Year Plans begun in 1933, 1938, 1946 and 1952.

1932

Famine (lasting to 1933) results from agrarian policy.

1933

About 1,000,000 members of Communist party expelled ( $\frac{1}{3}$  total membership).

Nov. 17—U. S. and Russia resume full relations; Russia gives list of guarantees, including pledge "to refrain from propaganda."

1934

Sept. 18—U.S.S.R. joins League.

Dec. 1—Kirov, Stalin supporter, assassinated; terror follows.

1935

Jan. 17—Zinoviev, Kamenev and other Old Bolshevik leaders convicted of treason and sentenced to prison.

Aug. 20—3rd International decides Russia will side with democracies against Fascist states.

1936

Aug. 19-23—Zinoviev and Kamenev retried; executed as collaborators with Trotsky and Nazi secret police.

Nov. 25—Japan signs anti-Comintern treaty with Germany.

Dec. 5—New Constitution reorganizes government and electoral system of Soviet Union.

1937

Feb. 1—Platakov executed after confessing aid to Trotsky; Radek is imprisoned.

June 12—Marshal Tukhachevsky and 7 generals executed for espionage and high treason.

1938

Mar.—Bukharin, Rykov, Yagoda and other prominent Bolsheviks convicted of treason and executed.

1939

May 3—Litvinov retires as Commissar for Foreign Affairs, marking end of Western orientation in Soviet diplomacy; Vyacheslav M. Molotov succeeds him.

Aug. 24—Russia and Germany sign 10-year nonaggression pact.

(For U.S.S.R. in World War II, the Cold War, and the U. N., see those sections.)

1943

May 15—3rd International (Comintern) dissolved in Moscow.



Europe before World War I. A few nations have disappeared.

1953

Jan. 13—Russia arrests 9 Kremlin physicians, mostly Jews, on charges they plotted death of high officials; freed Apr. 4.

Mar. 5—Stalin dies.

Mar. 6—Malenkov succeeds Stalin as Premier; Beria is Minister of Interior; Molotov is Foreign Minister.

July 10—Beria is imprisoned on charges of treason.

Sept. 13—Khrushchev becomes No. 2 man in Soviet hierarchy.

Dec. 23—Beria and 6 of his associates are executed.

(For later items, see News Record of 1954)

## The Rise of Hitler

THE CONSTITUTION of the Weimar Republic never really was given a chance by Germany's leaders; all culminated against the Treaty of Versailles instead of putting their house in order. When depression broke in 1930, Hitler's star really began to rise; and he was put into power because the antidemocratic forces of Germany believed he could be their pawn. He quickly became their master—of the army, the industrialists, the great eastern land owners.

Hitler destroyed the free unions and co-operatives, began his terrible extermination of the Jews, and co-ordinated the whole domestic economy to serve the needs for an expanding military machine. War frankly entered into his every calculation;

the "crimes" of the Versailles Treaty were to be rectified; Germany's "legitimate claims" for expansion to the east and overseas must be recognized.

The year 1936 was a turning point: then began those pressures in every direction, while the creation of the Axis formally gave him allies. The belief of British and French leaders that they could buy Hitler off was really idle; Munich represented the failure of the West. Hitler had once again convinced the Germans they were the master race; the alliance with the U.S.S.R. was accepted despite the earlier crusade against communism; the attack on Poland was cheered. A great people needed war to strengthen itself and to purge the world of the unfit.



European boundaries before World War II began.



Shaded area shows maximum German domination in World War II.



Germany after World War II.



- 1919**  
*Feb. 11*—Friedrich Ebert, Socialist, elected President.  
*Aug. 11*—Germany becomes republic as Weimar Constitution is promulgated.
- 1920**  
*Mar. 13-17*—Kapp putsch by monarchists results in brief seizure of Berlin government buildings; collapses as result of general strike.
- 1921**  
*Mar. 8*—Allies occupy Düsseldorf, Duisburg, Ruhrort because of reparations default; Germany accepts ultimatum, finances reparations May 11.
- 1922**  
*June 24*—Rathenau, liberal Foreign Minister, assassinated by nationalists.  
*Nov.*—Value of Mark, rated in 1914 at 4.2 to dollar, has fallen to 7,000 to dollar.
- 1923**  
*Jan. 11*—French and Belgians occupy Ruhr because of reparations default.  
*Sept. 26*—German passive resistance in Ruhr ends on pledge of American cooperation to avert collapse.  
*Nov. 8-9*—Munich beer hall putsch led by Hitler put down; Hitler sentenced to 5 years, serves less than 1; writes *Mein Kampf* in jail.  
*Nov. 20*—Mark falls to 4.2 trillion to dollar.
- 1924**  
*Apr. 9*—Dawes Plan reorganizes Reichsbank, revises reparations and lends Germany gold to back up currency.
- 1925**  
*Apr. 26*—Hindenburg elected President by minority vote.
- 1927**  
*Sept. 18*—Hindenburg repudiates German war guilt.
- 1929**  
*June 7*—Young Plan establishes Bank for International Settlements; reduces reparations.
- 1930**  
*July 16*—Hindenburg authorizes budget by decree; dissolves Reichstag because of opposition.  
*Sept. 14*—National Socialists (Nazis) win 107 seats in Reichstag (previously had 12); 2nd only to Social Democrats; Communists jump from 54 to 77. Election ushers in period of Nazi-Communist clashes.
- 1931**  
*May 11*—Austrian Credit Anstalt fails; 6,000,000 unemployed by 1932.
- 1932**  
*Apr. 10*—Hindenburg re-elected President, defeating Hitler.  
*May 30*—Chancellor Brüning, Centrist, resigns; headed coalition Cabinet.
- May 31*—Von Papen organizes Cabinet, excluding Nazis.  
*July 31*—Nazis elect 230 to Reichstag, Socialists 133, Centrists 97, Communists 89.  
*Aug. 13*—Hitler refuses Vice-Chancellorship; demands all or nothing.  
*Sept. 12*—President dissolves Reichstag.  
*Nov. 6*—Election fails to break deadlock; Nazis lose 2,000,000 votes.  
*Nov. 17*—Von Papen resigns.  
*Dec. 2*—Von Schleicher forms Cabinet.
- 1933**  
*Jan. 28*—Von Schleicher resigns.  
*Jan. 30*—Hitler made Chancellor of Germany by Hindenburg.  
*Feb. 27*—German Reichstag building burns; Communists accused.  
*Mar. 5*—Reichstag elections give Nazis and Nationalist allies 52% of vote.  
*Mar. 23*—Reichstag gives Hitler blanket powers for 4 years; 94 Social Democrats opposed; many Social Democrats and all Communists under arrest or in hiding.  
*Mar. 28*—Nazis begin systematic boycott of Jewish businessmen, doctors, lawyers.  
*Oct. 14*—Germany to quit League in 1935.  
*Nov. 12*—92% of all voters cast ballots for Nazis in 1-party election; 3,000,000 invalid ballots register opposition.
- 1934**  
*Jan. 10*—Van der Lubbe, Dutch Communist, beheaded for Reichstag fire.  
*June 14*—Germany declares moratorium on foreign-loan payments.  
*June 30*—Hitler "purge" kills Ernst Röhm and other Nazi leaders.  
*July 25*—Dollfuss assassinated.  
*Aug. 2*—Hindenburg dies; Hitler becomes absolute dictator of Germany.
- 1935**  
*Jan. 13*—Saar plebiscite 90% for re-union with Germany; Saar returned to Germany Mar. 1.  
*Mar. 16*—Hitler defies Versailles Treaty by re-establishing universal military training in Germany.  
*June 18*—Anglo-German naval pact allows German navy 35% of British tonnage.  
*Sept. 15*—Nuremberg laws deprive Jews of citizenship and bar intermarriage.
- 1936**  
*Mar. 7*—Hitler sends German troops into Rhineland, defying Versailles Treaty; denounces Locarno Pact.  
*Mar. 29*—Hitler receives 98.79% vote in German elections.  
*Oct. 27*—Rome-Berlin Axis formed.  
*Nov. 18*—Italy and Germany recognize Franco regime in Spain.

Nov. 25—Japan signs anti-Comintern treaty with Germany; Italy adheres Nov. 6, 1937.

1937

Jan. 2—Britain and Italy sign accord to respect each other's rights and interests in Mediterranean area.

Jan. 30—Hitler scraps war-guilt clause of Versailles Treaty.

July 1—Rev. Niemöller arrested.

Nov. 29—Britain and France agree to give Hitler colonies in exchange for peace.

1938

Feb. 4—Hitler announces seizure of army control; Ribbentrop becomes Foreign Minister.

Feb. 16—Austria, yielding to Hitler's threats, puts Nazis in Cabinet.

Mar. 12—Nazis seize Austrian government; Schuschnigg ousted.

Apr. 10—Austrians claim 99.75% vote for *Anschluss* (union with Germany).

Sept. 12—Hitler demands self-determination for Germans in Sudetenland.

Sept. 19—Britain and France urge Czechs to surrender Sudetenland.

Sept. 29-30—Britain, France, Italy, Germany in parley at Munich agree to dismemberment of Czechoslovakia; Chamberlain returns to London with "Peace in our time."

Oct. 1—Nazi troops cross Czech border; Czechs yield Teschen to Poland.

Oct. 3—Hitler makes triumphant entry into Sudetenland.

Oct. 5—Beneš resigns as Czech President.

Nov. 2—Hungary gets slice of Czechoslovakia.

Nov. 10—Assassination of German en-

voy Ernst vom Rath in Paris by Herschel Grynszpan looses Nazi wrath against Jews over all Reich.

Nov. 13—Jews herded into camps; fined \$400,000,000 because of Vom Rath assassination.

Dec. 6—Franco-German amity pact signed.

1939

Mar. 15—Hitler enters Prague.

Mar. 16—Bohemia-Moravia becomes German protectorate; Hitler assumes protection of Slovakia; Hungary annexes Ruthenia.

Mar. 22—Lithuania cedes Memel to Germany.

Mar. 31—Britain and France pledge aid if Poland resists Nazi attacks.

Apr. 28—Hitler scraps war-renunciation treaty with Poland and naval pact with Britain; demands Danzig; rebuffs FDR's peace plea.

May 5—Poland refuses to yield Danzig to Hitler; offers to negotiate.

May 22—Germany and Italy sign 10-year military pact.

June 13—Himmler sent to crush Czech unrest.

Aug. 19—Germany and Russia sign 7-year trade agreement; sign 10-year nonaggression pact Aug. 24.

Aug. 27—Hitler demands Danzig and Corridor; agrees Aug. 29 to negotiate; asks for Polish delegate; considers plan rejected Aug. 31 when no Polish delegate appears; publishes 16-point peace plan, which Poland rejects.

Sept. 1—Germany invades Poland and annexes Danzig; Britain and France give Hitler ultimatum.

Sept. 3—Britain and France declare war.

## Conflicts Preliminary to World War II

THE UNITED STATES cannot blink away its share of the responsibility for the disorders the world over in the 1930s: for it refused to participate in the creation of an international machinery to preserve the peace. The depression of the decade and the rise of dictators in the Axis countries permitted adventurers to fish in troubled waters. Civil war was kept alive

in Spain because of German and Russian intervention; the League of Nations would not impose sanctions against Italy for its assault on Ethiopia; the U. S. was willing to halt Japan's movement into Manchuria—but Britain held back. Undeclared war therefore raged in many quarters of the globe; it turned out to be a dress rehearsal—as new weapons were being tested—for the war that swept the whole world in 1939.

### ETHIOPIAN INVASION

1934

Dec. 5—Italians and Ethiopians clash on Somaliland border.

1935

Oct. 3—War begins as Italians invade Ethiopia.

Oct. 7—League condemns Italy.

Nov. 18—League economic and financial sanctions against Italy go into effect. (Embargo on oil never applied.)

1936

Mar. 3—League appeals to both belligerents to cease hostilities.

*May 1*—Emperor Haile Selassie flees Ethiopia.

*May 5*—Italians capture Addis Ababa.

*May 9*—Italy formally annexes Ethiopia; King of Italy becomes Emperor of Ethiopia.

*July 15*—League lifts sanctions against Italy.

## SPANISH CIVIL WAR

**1931**

*Apr. 12*—Municipal elections in Spain give republicans overwhelming majority.

*Apr. 14*—Alfonso XIII quits Spain; Alcalá Zamora becomes President of provisional republic.

*Dec. 9*—New constitution proclaimed; provides for secularization of state.

**1933**

*Nov. 19*—Power in Spain shifts to center-right as leftists lose heavily in parliamentary elections.

**1934**

*Oct. 6*—Catalonia (already autonomous state of Spanish republic) declares its independence in opposition to Spain's shift to right; revolt put down by Spain; Catalonia's autonomy suspended pending revision.

**1936**

*Feb. 16*—Spanish Popular Front (republicans and leftists) wins parliamentary elections.

*July 17*—Civil war begins; troops led by Gen. Francisco Franco revolt in Spanish Morocco; uprisings follow all over Spain.

*Oct. 1*—Franco named Chief of State by rebels; establishes capital at Burgos.

*Nov. 6*—Loyalist government moves capital to Valencia as Madrid is besieged.

*Nov. 18*—Italy and Germany recognize Franco's regime in Spain.

**1937**

*June 19*—Basque city of Bilbao falls to rebels.

*Oct. 28*—Loyalists move capital to Barcelona.

**1938**

*Apr. 15*—Loyalist-held Spain cut in two by rebels.

*Dec. 23*—Rebels begin final offensive.

**1939**

*Jan. 26*—Barcelona falls to rebels.

*Feb. 27*—France and England recognize Franco government.

*Mar. 28*—Madrid surrenders.

*Apr. 1*—Franco declares civil war at end.

## CHINA AND JAPAN

**1931**

*Sept. 18-19*—Explosion on Manchurian railway serves as pretext for Japan to begin occupation of Manchuria.

*Nov.-Dec.*—Japanese exports to China drastically cut by Chinese boycott.

**1932**

*Jan. 28*—Japan begins invasion of international settlement of Shanghai to force Chinese to drop boycott; boycott ended May 5; Japanese troops withdrawn.

*Feb. 18*—Manchuria renamed Manchukuo; declared independent, but is actually Japanese puppet state.

*Oct. 2*—Lytton Report issued by League of Nations rebukes Japan for seizure of Manchuria.

**1933**

*Jan.*—Japanese begin invasion of Jehol province; becomes part of Manchukuo.

*May 31*—China accepts armistice at Tangku; Japanese troops to be withdrawn to north of Great Wall.

**1937**

*July 7*—Japan begins undeclared war on China; fighting continues throughout World War II until fall of Japan.

**1945**

*Sept. 9*—Japanese troops in China formally surrender.

## ARMED FORCES

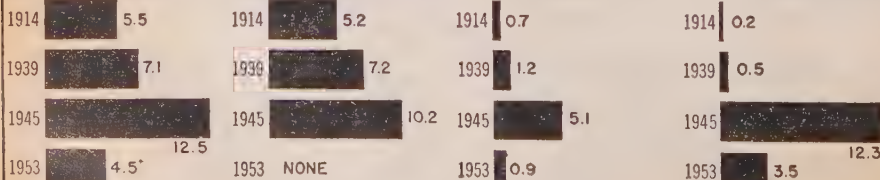
MILLIONS

U.S.S.R.

GERMANY

BRITAIN

U.S.A.





## World War II

**H**ITLER had planned his grand campaign with impressive skill: he gained time for his invasion of Poland through his alliance with Russia; he bought time in the West through the "phony" war. With Poland conquered, he turned on France, and by June 1940 it had fallen. Britain, however, stood firm despite the great havoc of the Blitz; Hitler's generals warned him that landings from the sea would fail. Now he swung east, cynically repudiating his treaty with the Russians—and was at the gates of Moscow before winter.

But there were two miscalculations: Russia held; and America's lend-lease program was beginning to pour desperately needed supplies to Britain, Russia, and the other powers standing off Germany, Italy, and Japan.

Now Japan tried to eliminate the U. S., and almost did so by the surprise attack on Pearl Harbor when a good part of the

American fleet was immobilized. Japan drove south and east, overextending its lines but containing a large part of the American military strength. Up to 1943 our action in the East was defensive, for it had been agreed among the Allies that Europe had to be won first. Supplies through lend-lease built up the resistance of Britain, Free France, Russia; and when the Russians won their great victory at Stalin-grad and American armies landed in Africa, Italy, and France, Hitler was done.

Then MacArthur, covered by a new and large American navy and air fleet, was able to move north; and it was only a matter of time, too, as far as Japan was concerned. The Germans accepted unconditional surrender in May 1945, following Hitler's suicide; the Japanese did similarly in August, following the dropping of the atomic bombs on Hiroshima and Nagasaki. A new century of peace was to open up; but peace among the Allies lasted about a year.

### 1939

*Sept. 1*—Germany invades Poland and annexes Danzig; Britain and France give Hitler ultimatum to stop hostilities.

*Sept. 3*—Britain and France declare war on Germany.

*Sept. 5*—U. S. proclaims neutrality.

*Sept. 17*—Russia invades Poland.

*Sept. 18*—Nazi and Russian armies meet at Brest-Litovsk, Poland.

*Sept. 27*—Warsaw surrenders.

*Sept. 28*—Poland partitioned by Germany and Russia.

*Oct. 9*—U. S. ship *City of Flint* captured by Germans; released Nov. 4.

*Oct. 14*—British battleship *Royal Oak* sunk at Scapa Flow.

*Nov. 30*—Russia attacks Finland from land, sea, air; bombs Helsinki.

*Dec. 17*—Admiral *Graf Spee* scuttled off Montevideo by Hitler order after fleeing British warships.

### 1940

*Mar. 12*—Finland surrenders.

*Apr. 9*—Nazis invade Denmark and Norway.

*May 10*—Nazis invade Netherlands, Belgium, Luxembourg.

*May 10*—Chamberlain resigns as Prime Minister; Churchill takes over.

*May 12*—Germans cross French frontier.

*May 13*—Churchill tells Britain he has "nothing to offer but blood, toll, tears and sweat."

*May 14*—Dutch surrender.

*May 26–June 3*—Dunkirk evacuation:

about 335,000 out of 400,000 Allied soldiers rescued from Belgium by civilian and naval craft from Britain.

*May 28*—King Leopold surrenders Belgian army; Cabinet disowns him.

*June 9*—Norway surrenders.

*June 10*—Italy declares war on France and Britain; invades France.

*June 14*—Germans enter Paris; city undefended.

*June 15*—Russia seizes Lithuania; seizes Latvia and Estonia June 17.

*June 16*—Pétain government formed in Bordeaux; moved to Vichy July 2.

*June 22*—France and Germany sign armistice at Compiègne.

*June 23*—De Gaulle forms French Natl. Comm. in London; announces Free French will carry on war.

*Aug. 8*—German Luftwaffe launches all-out attack on England.

*Sept. 13*—Italians invade Egypt from Libya.

*Sept. 27*—Germany, Italy, Japan sign 10-year military-economic pact.

*Oct. 28*—Italy invades Greece.

*Nov. 11–12*—British cripple Italian fleet at Taranto.

*Nov. 14*—Nazis bomb Coventry.

*Nov. 20*—Hungary joins Axis; Rumania joins Nov. 23.

### 1941

*Jan. 22*—British take Tobruk.

*Mar. 1*—Bulgaria joins Axis.

*Mar. 25*—Yugoslavia joins Axis; pro-Axis government ousted Mar. 27.

Apr. 6—Germany marches on Yugoslavia and Greece.

Apr. 13—Russia and Japan sign 5-year neutrality pact.

Apr. 17—Yugoslavia surrenders; Gen. Mikhailovic continues guerrilla warfare; Tito leads left-wing guerrillas.

Apr. 27—Nazi tanks enter Athens; remnants of British army quit Greece.

May 10—Rudolf Hess, Nazi Deputy Führer, lands in Scotland by plane.

May 11—Nazi bombs severely damage House of Commons chamber and Westminster Abbey.

May 19—Italian forces in Ethiopia surrender to British.

May 24—HMS *Hood*, largest British warship, sunk by Nazi battleship *Bismarck*; *Bismarck* sunk by British naval and air attack May 27.

June 1—Crete overrun by Nazis.

June 22—Hitler attacks Russia.

July 12—Nazis break "Stalin Line," menacing Kiev, Moscow, Leningrad.

July 13—Britain and Russia sign 20-year mutual-aid pact.

July 20—British broadcast calls for "V for Victory" campaign.

Aug. 12—Pétain summons France to full support of Hitler.

Aug. 20—Russians blow up Dnieper dam as Nazis sweep across Ukraine.

Aug. 28—Iran yields to British-Soviet troops; agrees to occupation.

Sept. 8—Germans reach Neva River in drive to encircle Leningrad.

Oct. 3—Hitler announces Russia is defeated and will never rise again.

Oct. 16—Japanese Cabinet falls in crisis; Tojo is new Premier Oct. 18.

Dec. 6—Russians begin counteroffensive at Moscow.

Dec. 7—Japan attacks Pearl Harbor, Philippines, Guam.

Dec. 8—U. S. and Britain declare war on Japan.

Dec. 8—Berlin announces drive on Moscow is off for winter.

Dec. 9—Japanese invade Malaya.

Dec. 10—Japanese land on Luzon.

Dec. 10—Japanese planes sink British battleship *Prince of Wales* and battle cruiser *Repulse* off Malaya.

Dec. 11—Germany and Italy declare war on U. S.; Congress declares war on those countries.

Dec. 12—Japanese occupy Guam.

Dec. 19—MacArthur made full General.

Dec. 20—Adm. King given top U. S. Naval command.

Dec. 21—Hitler ousts Field Marshal Walther von Brauchitsch; takes supreme command.

Dec. 22—Churchill at White House for war parleys.

Dec. 23—Wake captured by Japan.

Dec. 25—Hong Kong falls to Japan.

Dec. 27—Japanese bomb open city of Manila.

## 1942

Jan. 2—MacArthur gives up Manila; fights on for Bataan and Corregidor.

Jan. 26—U. S. troops land in Northern Ireland.

Jan. 31—1st U. S. Navy task force attack on Marshall and Gilbert Islands.

Feb. 15—British surrender Singapore.

Feb. 28—Japanese invade Java.

Mar. 8—Japanese land on New Guinea.

Mar. 17—MacArthur arrives in Australia; promises "I will return."

Apr. 9—U. S. forces on Bataan surrender.

Apr. 14—Laval becomes Premier of France.

Apr. 18—U. S. planes from carrier *Hornet* bomb Tokyo, Yokohama, Kobe, Nagoya.

## War Strength, 1942

### UNITED NATIONS AXIS

POPULATION



1,100 MILLION 260 MILLION

ARMIES



10 MILLION 11 MILLION

BATTLESHIPS



33 20

AIRFORCE



13,000 13,000

*May 4-8*—Japanese fleet suffers heavy losses in Coral Sea; 1st naval battle in history fought entirely with carrier aircraft.

*May 6*—Gen. Wainwright surrenders Corregidor.

*May 30*—Over 1,000 RAF planes smash Cologne in one of war's mightiest raids.

*June 4-6*—U. S. aircraft inflict 1st serious setback on Japanese fleet near Midway.

*June 10*—Lidice, Czechoslovakia, razed; all males put to death in Nazi terror following Heydrich assassination.

*June 12*—Japanese land in Aleutians.

*Nov. 5*—Montgomery announces victory over Rommel's forces in Egypt.

*Nov. 8*—U. S. and Britain land great army in French North Africa.

*Nov. 11*—Nazis begin occupation of all France.

*Nov. 13-15*—U. S. smashes Japanese armada in Solomons.

*Nov. 18*—Chief of State Pétain makes Laval dictator of France.

*Nov. 22*—Russia begins counteroffensive at Stalingrad.

*Nov. 27*—French scuttle main part of fleet at Toulon to save it from Nazis.

## 1943

*Jan. 14-24*—Casablanca Conference: Churchill and FDR agree on unconditional-surrender goal.

*Jan. 18*—Russians announce breaking of 17-month Leningrad siege.

*Jan. 27*—First all-U. S. air raids over Reich.

*Feb. 1-2*—German 6th Army surrenders at Stalingrad; turning point of war in Russia.

*Feb. 6*—Eisenhower to command Allied armies in North Africa.

*Feb. 9*—Japanese evacuate Guadalcanal.

*Feb. 16*—Russians take Kharkov.

*Mar. 2-4*—Japanese lose 10 warships, 12 transports as Allied planes smash convoy in Bismarck Sea.

*May 7*—Americans take Bizerte; British take Tunis.

*May 11*—Americans land in Aleutians.

*May 12*—Remnants of Nazis trapped on Cape Bon, ending war in Africa.

*July 10*—Allies invade Sicily.

*July 25*—Mussolini deposed; Badoglio is Premier.

*Aug. 17*—Sicily conquest complete.

*Sept. 3*—Allied troops land on Italian mainland.

*Sept. 8*—Italy surrenders.

*Sept. 10*—Nazis seize Rome.

*Oct. 13*—Italy declares war on Germany.

*Oct. 19-Nov. 1*—Moscow Conference: Hull, Eden, Molotov pledge unity to win war and establish world organization; promise democratic Italy and free Austria.

*Nov. 6*—Russians retake Kiev.

*Nov. 20*—Marines land in Gilbert Is.

*Nov. 22-26*—Cairo Conference: FDR, Churchill, Chiang Kai-shek pledge defeat of Japan, free Korea.

*Nov. 28-Dec. 1*—Teheran Conference: FDR, Churchill, Stalin agree on invasion plans.

*Dec. 24*—Eisenhower named to command invasion of Europe.

*Dec. 26*—Nazi battleship *Scharnhorst* sunk by British off Norway.

## 1944

*Jan. 4*—Russian army over Polish line.

*Jan. 22*—Allied troops land behind German lines at Anzio near Rome.

*Jan. 31*—Marines and Army troops land on Kwajalein atoll in Marshalls.

*June 4*—Rome falls to Allies.

*June 6*—U. S., British and Canadian forces land in France (D-Day).

*June 11*—Russians begin offensive against Finland in Karelian Isthmus.

*June 15*—New B-29 Superfortresses bomb Japan for 1st time.

*June 15*—Germans begin robot-bomb attacks on England.

*June 26*—Cherbourg falls to Allies.

*July 20*—Hitler wounded in bomb plot.

*July 20*—U. S. forces land on Guam.

*Aug. 15*—Allies land in southern France.

*Aug. 25*—Paris liberated.

*Sept. 4*—Antwerp, Brussels retaken.

*Sept. 4*—Finnish-Russian fighting ceases.

*Sept. 11*—Americans enter Germany.

*Sept. 17*—Allied airborne army lands in Netherlands.

*Sept. 24*—Red Army makes gains on Czech and Hungarian borders.

*Oct. 20*—U. S. troops invade Philippines.

*Oct. 28*—Bulgaria signs armistice with Allies.

*Dec. 16*—Germans launch counteroffensive in Belgium (Battle of Bulge).

## 1945

*Jan. 12*—German line crumbles; Allies regain 100 sq. mi. in "Bulge."

*Jan. 17*—Russians take Warsaw.

*Feb. 3*—U. S. troops enter Manila.

*Feb. 5*—U. S. 3rd Army smashes through Siegfried Line.

*Feb. 6*—Russians cross Oder River.

*Feb. 11*—Yalta agreement signed by FDR, Churchill, Stalin.

*Feb. 13*—Russians take Budapest.

*Feb. 19*—Marines land on Iwo Jima; raise flag on Mt. Suribachi Feb. 23.



*Mar. 10*—300 Superfortresses bomb Tokyo.  
*Mar. 16*—Iwo Jima falls to U. S.  
*Mar. 22*—U. S. 3rd Army over Rhine.  
*Mar. 30*—Russians take Danzig.  
*Apr. 1*—U. S. invades Okinawa.  
*Apr. 13*—Russians take Vienna.  
*Apr. 25*—U. N. parley opens at San Francisco.  
*Apr. 25*—Americans and Russians meet on Elbe.  
*Apr. 26*—Bremen falls to British.  
*Apr. 28*—Mussolini and mistress, Clara Petacci, killed by partisans.  
*Apr. 29*—33,000 inmates of Dachau concentration camp freed by U. S. forces.  
*Apr. 30*—Soviet flag raised over Reichstag in Berlin.  
*May 1*—Grand Adm. Karl Doenitz takes command in Germany; death of Hitler announced.  
*May 2*—Berlin falls.  
*May 7*—Germany surrenders unconditionally at 2:41 A.M., French time; surrender formally ratified May 8.  
*May 23*—Doenitz and aides seized; Himmler commits suicide by poison.

*June 21*—Okinawa won by 10th Army.  
*July 17–Aug. 2*—Potsdam Conference: Truman, Churchill (Attlee after July 28), Stalin establish council of foreign ministers to prepare peace treaties; plan German postwar government and reparations.  
*Aug. 6*—Hiroshima hit by A-bomb.  
*Aug. 8*—Russia declares war on Japan.  
*Aug. 9*—Nagasaki hit by A-bomb.  
*Aug. 14*—Japan accepts surrender terms.  
*Sept. 2*—Japanese sign surrender terms aboard battleship *Missouri* (V-J Day).

#### 1946

*Apr. 3*—Lt. Gen. Homma executed; ordered Bataan Death March.  
*Oct. 1*—Verdict in Nuremberg war trial: 12 Nazi leaders (including 1 tried in absentia) sentenced to hang; 7 imprisoned; 3 acquitted.  
*Oct. 15*—Goering commits suicide a few hours before 10 other Nazis are executed Oct. 16.

#### 1948

*Nov. 12*—Verdict in Japanese war trial: Tojo and 6 others sentenced to hang (hanged Dec. 23); 18 imprisoned.

## Cold War

IT TOOK about a year for the Western Powers to learn that "peace" to the U.S.S.R. meant the opportunity to spread the influence of communism either by infiltration or direct assistance or open aggression. The U.S.S.R. made solemn commitments at Yalta and Potsdam, and through its membership in the United Nations. This did not prevent Communists—with the aid of Russia—from fomenting disorders in France, Italy and Greece, and also in the Far East. Again—with Russian aid—Communists seized power in Poland, Czechoslovakia, Albania, Hungary, Rumania and Bulgaria; and the satellite states were created. Russia itself moved into Manchuria and Mongolia.

In 1947, America realized that there was war in a good part of the world; but it was a "cold war." The Truman Doctrine of 1947 offered help to Greece and Turkey against the Communists. The Marshall Plan of the same year offered loans and grants to nations seeking their economic rehabilitation to strengthen their own defenses against communism. Meanwhile China had gone Red; and, in 1950, the North Korean Communists (backed up by

Russia and China) challenged the West by their invasion of South Korea. The world's fate hung in the balance; and then the decision of President Truman to support the U. N. to the full to check aggression decided events for many years. For the "cold war" did not become a "hot war" in the sense that arms universally were taken up. Yet the peace of the world hung precariously in the balance. France's 7-year conflict in Indo-China with Communist bands took on the major proportions of war in 1954 until a truce highly favorable to the Communists was reached in July. No peace treaty for Korea emerged. The Western Allies developed internal differences: over the arming of Germany and the creation of a European Defense Community. America seemed to be losing its arms superiority, and unhappy on-lookers seemed to see 1938 and perhaps even 1939 repeating themselves. And the "cold war" goes on because the West is on the alert—through the creation of the North Atlantic Community and talks of a European Defense Community—while the Russians and their satellites maintain pressures.

#### 1945

*June 28*—Polish government under Russian influence installed, despite protests of government-in-exile.

*July 5*—U. S. and Britain recognize Polish provisional government in place of government-in-exile.

*Nov. 15*—Truman, Attlee, Mackenzie

King decide in Washington conference that atom-bomb secrets will not be shared until U. N. adopts control plan.

1946

Apr. 29—U. S. proposes treaty with Britain, Russia, France to keep Germany disarmed 25 years; Russia cool to idea.

May 31—U. S. and Britain demand free elections in Rumania.

July 29—Britain accepts U. S. proposal for economic co-operation between their German occupation zones.

Dec. 19—Fighting breaks out in Indo-China as French refuse to accede to Communist demands.

1947

Jan. 19—Polish Communists win election victory.

Jan. 28—U. S. rebukes Polish Communists for rigging election.

Feb. 10—Peace treaties for Italy, Rumania, Bulgaria, Hungary, Finland signed in Paris.

Mar. 4—Russia rejects U. S. plan for U. N. atomic-energy control.

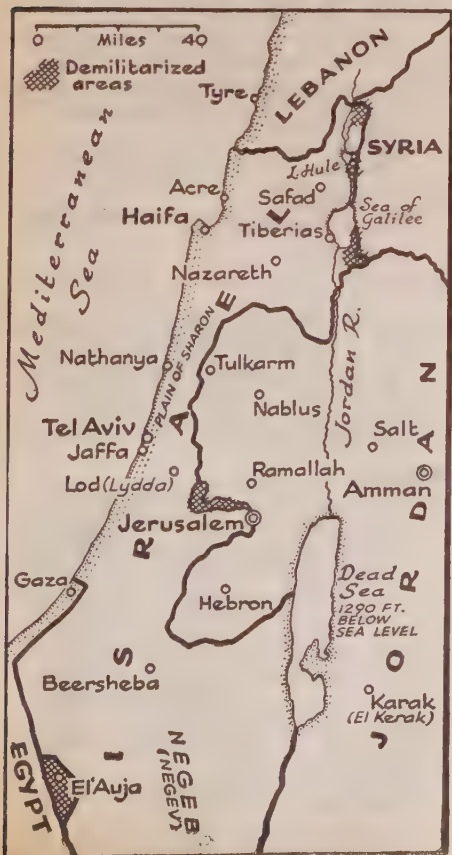
Mar. 10-Apr. 24—Big 4 Council of Foreign Ministers fail to draw up treaties for Germany and Austria.

Mar. 12—Truman asks Congress for \$400 million to save Greece and Turkey from Communist expansion (Truman Doctrine).

May 23—U. N. Commission finds Yugoslavia, Bulgaria, Albania guilty of aiding Greek guerrillas.

June 5—Secy. of State Marshall says U. S. may have to spend billions to

**TROUBLED AREAS**—Israel (below, left) had a truce with its Arab neighbors, but no peace treaty. Trieste (right) was claimed by both Italy and Yugoslavia. Its Zone A was occupied by American and British troops; Zone B by Yugoslavia. (For other troubled areas, see Map Section elsewhere in this book.)



# ECONOMIC STRENGTH— NATO VS. SOVIET BLOC

IN PERCENT OF WORLD TOTAL

## NATO

## SOVIET BLOC

## POPULATION



16%

32%

## STEEL



63%

20%

## OIL



52%

6%

## COAL



56%

34%

## GRAINS



38%

39%

put Europe on its feet economically (Marshall Plan).

**July 12-15**—16 nations meet in Paris to study Marshall Plan (Russia and 8 others stay away); set up Comm. of European Economic Cooperation, which says Sept. 22 that Europe will need \$15.81-billion aid from U. S. in next 4 years.

**Aug. 31**—Communist-led coalition controls 65% of Hungarian legislature; Communists received 21% of votes.

**Oct. 5**—Moscow announces formation of new 9-nation Communist Information Bureau (Cominform).

**Dec. 30**—King Michael abdicates; Rumania declared "People's Republic."

## 1948

**Feb. 23-25**—Communists seize power in Czechoslovakia.

**Mar. 10**—Czech For. Min. Jan Masaryk plunges to death.

**Mar. 17**—Truman asks Congress to revive draft.

**Apr. 18-19**—Communists and supporters beaten in Italian elections; win 31% of vote; Christian Democrats win 49%.

**June 7**—Beneš resigns as Czech President.

**June 17**—6-power plan for separate state of West Germany ratified.

**June 18**—Russia stops rail and road traffic between Berlin and Western occupation zones; American, British, French isolated in city.

**June 21**—Airlift begins; brings supplies to isolated West Berlin; ends May 12, 1949, Russia yielding.

**June 28**—Cominform denounces Premier Tito of Yugoslavia.

**July 1**—Russians withdraw from Allied Kommandatura (4-power government of Berlin).

**Oct. 26-5** European Western Union nations ask U. S. and Canada to join in North Atlantic military alliance.

**Oct. 30**—Chinese Reds clear Manchuria of nationalist troops.

## 1949

**Feb. 8**—Hungary sentences Cardinal Mindszenty to life imprisonment.

**Mar. 8**—4 Bulgarian Protestant clergymen sentenced in Sofia to life imprisonment for espionage and treason.

**Apr. 4**—North Atlantic Treaty signed.

**May 8**—Parliamentary Council of West Germany approves Constitution for federal republic.

**June 20**—Council of Foreign Ministers adjourns without agreement on unifying Germany.

**July 13**—Pope decrees excommunication for Catholics who are aggressive Communists.

**July 21**—Senate (82-13) ratifies North Atlantic Treaty.

**Aug. 8**—12-nation Council of Europe holds 1st meeting in Strasbourg.

**Sept. 8**—U. S. grants \$20-million loan to Tito to help Yugoslavian rehabilitation.

**Oct. 16**—Greek rebels announce end of military operations.

## 1950

**Feb. 21**—Hungary sentences Robert A. Vogeler, Jr., U. S. businessman who "confessed" to spying in Hungary, to 15 years; released Apr. 28, 1951, after 17-month imprisonment.

**May 23**—Western Allies demand dissolution of East German police militia created by Russia; say it is beginning of new German army.

**June 25**—North Koreans cross 38th parallel to invade South Korea.

**Sept. 19**—U. S., Britain, France pledge to fight if West Germany or West Berlin is attacked.

**Dec. 16**—Truman proclaims state of emergency.

**Dec. 19**—Eisenhower named commander of NATO forces in Europe.



1951

*Mar. 19*—6 nations initial Schuman Plan to pool European coal and steel market. (In effect Feb. 10, 1953.)

*Apr. 4*—Senate approves dispatch of 4 additional Army divisions to Europe; advises Truman to send no more without Congressional consent.

*Apr. 23*—Czechoslovakia jails AP man, William N. Oatis, on charges of hostile activities; Oatis "confesses" July 2 to spying; sentenced July 4 to 10 years; released May 16, 1953.

*Sept. 20*—North Atlantic Council votes to admit Greece and Turkey.

*Oct. 10*—Mutual Security Act signed; establishes agency to administer economic, military, technical aid to NATO and other friendly nations.

1952

*Feb. 19*—French National Assembly approves European army project.

*Feb. 20-25*—NATO conference approves European Army; sets goal of 50 divisions and 4,000 planes by end of 1952.

*Mar. 23*—Truman allocates \$4.3 million to aid escapees from behind Iron Curtain.

*May 26*—Western Allies and West Germany sign Peace Contract at Bonn.

*May 27*—6 nations sign European Defense Community treaty at Paris.

*July 1*—Senate (77-5) ratifies West German Peace Contract.

*Oct. 5*—19th All-Union Communist Party Congress opens; Malenkov says U. S. will "wreck the peace."

1953

*Jan. 7*—Truman warns Stalin U. S. has developed hydrogen bomb.

*Feb. 28*—Yugoslavia, Greece, Turkey sign 5-year friendship alliance.

*Mar. 6*—Malenkov succeeds Stalin (died March 5) as Russian Premier.

*Mar. 15*—Malenkov says there are no controversial issues that cannot be solved peacefully.

*Mar. 19*—West Germany ratifies European Defense Community treaty.

*May 16*—William N. Oatis, AP reporter, freed by Czechs after 2 years in prison.

*June 17*—East Berliners rise against Communist rule; quelled by tanks.

*July 12*—Russia rejects U. S. offer of free food for East Germany.

*July 13*—Congress completes action on U. S. aid bill; calls for cutting off all foreign aid by June 30, 1956, and for ending military aid a year later.

*July 27-28*—120,000 East Germans cross to West Berlin for gift food.

*Aug. 20*—Moscow announces explosion of hydrogen bomb.

*Dec. 14*—Dulles tells Europe U. S. will make "agonizing reappraisal" of policy unless EDC is ratified.

(For later items, see News Record of 1954)

## Korea

KOREA, an independent kingdom in ancient times, was placed under Chinese sovereignty in 1627, and was annexed by Japan in 1910. At the end of World War II in 1945, Russian troops occupied the northern half of Korea down to the 38th parallel, and U. S. troops occupied the southern half.

Russia set up a puppet government, which, on May 1, 1948, proclaimed jurisdiction over the whole country. Its capital was Pyongyang. With U. N. supervision, elections were held in South Korea, and the Republic of Korea was proclaimed, with Seoul as capital, Aug. 15, 1948.

Russia announced on Jan. 1, 1949, that its occupation troops had been withdrawn from North Korea. The U. S. withdrew its last troops from South Korea on June 29, 1949.

Early on the morning of Sunday, June 25, 1950, Korean time, the Communist North Korean army invaded the Republic of Korea, attacking southward across the 38th parallel. This was Saturday afternoon, June 24, New York time.

In the following chronology, Korean dates are used for events that took place there, American dates for events that took place here.

1950

*June 25*—North Koreans invade Republic of Korea.

*June 27*—Truman orders U. S. air and sea aid to South Koreans.

*June 28*—Reds capture Seoul.

*July 8*—Truman names MacArthur commander of U. N. forces in Korea.

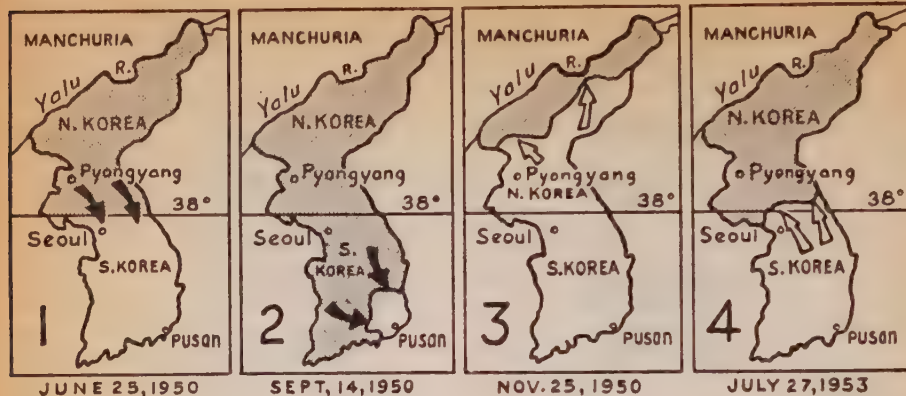
(During the rest of July, the small

U. N. forces were swept back in retreat down the peninsula.)

*Aug. 3*—Allied forces set up Pusan perimeter defense behind Nakdong River.

*Sept. 6*—Reds capture Pohang, high point of their offensive that failed to drive U. N. forces out of Korea.

*Sept. 15*—U. S. 10th Corps makes amphibious landing at Inchon, port for Seoul; cuts behind North Koreans,



Sept. 26—MacArthur announces capture of Seoul.

Oct. 7—U. S. 1st Cavalry make 1st U. S. crossing of 38th parallel.

Oct. 15—Truman and MacArthur meet on Wake Island.

Oct. 20—Allies capture Pyongyang.

Oct. 26—South Korean troops reach Manchurian border.

Oct. 27—Chinese Communist troops encountered in combat below Yalu River.

Nov. 6—MacArthur notifies U. N. that Chinese Reds have entered war.

Nov. 20—U. S. 7th Division unit reaches Manchurian border.

Nov. 26—Chinese open massive offensive; hurl U. N. forces back.

Dec. 4—U. N. troops abandon Pyongyang.

Nov. 29-Dec. 11—U. N. forces stranded at Changjin Reservoir; escape to Hungnam; are evacuated by sea Dec. 12-24.

Dec. 26—U. N. ground forces in Korea unified under command of Lt. Gen. Matthew B. Ridgway.

## 1951

Jan. 4—Reds recapture Seoul.

Mar. 14—Allies reoccupy Seoul; abandoned by Reds without fight.

Mar. 24—MacArthur intimates U. N. will attack Red China; says he will meet with Reds at any time for truce talks.

(As MacArthur had not cleared his truce bid with Washington, it became a large factor in his subsequent dismissal. Previously, the U. S. had given its U. N. allies a proposed statement of war aims.)

Mar. 31—U. S. tank patrol recrosses 38th parallel into North Korea.

Apr. 5—MacArthur's letter to Rep. Joseph W. Martin, Jr. (R., Mass.) disclosed; favors stronger war measures, including use of Chinese Nationalists.

Apr. 11—Truman removes MacArthur from all commands; replaces him with Ridgway.

Apr. 19—MacArthur addresses joint session of Congress.

July 10—Top-level truce talks open at Kaesong.

(As a result of various disputes, truce talks were suspended July 12-14, July 21-24, Aug. 5-10 and Aug. 23-Oct. 25.)

Oct. 25—Truce talks resume in Panmunjom.

Nov. 14—Col. James Hanley, chief of U. S. 8th Army's Judge Advocate Section, says Reds have killed 5,500 U. S. POWs in Korea.

Nov. 20—Ridgway says 365 U. S. POWs known killed and over 6,000 believed killed by Reds; regrets Hanley's statement was issued without proper coordination.

Nov. 27—Both sides agree present battlefront will be cease-fire line if armistice is signed in 30 days. (It isn't.)

## 1952

Feb. 26—Churchill reveals secret Labour government agreement with Truman to bomb Manchurian air bases if Red air attack in Korea increases.

Apr. 28—Ridgway appointed successor to Eisenhower in Europe; succeeded in Korea by Gen. Mark W. Clark, May 12.

May 7—Truman says U. N. will never return Chinese and Korean Communist prisoners who fear to go back.

May 10—Communist war prisoners on Koje Island release Brig. Gen. Francis T. Dodd, held captive since May 7.

June 10—38 Reds and 1 American killed in fighting to clear Compound 76 on Koje Island.

June 23-26—500 U. N. planes cripple 5 North Korean power plants.

(As truce talks entered their 2nd year July 10, only one dispute separated the two sides; whether or not all Communist POWs should be forced to go back to North Korea or Red China. A screening of all Red prisoners showed that 83,000 were willing to go back; 87,000 did not wish to do so.)

July 26-Sept. 28—Truce talks deadlocked.

Sept. 28—3 possible plans offered by U. N. for voluntary return of POWs; rejected by Reds Oct. 8; talks recessed indefinitely.

## 1953

Jan. 23—Lt. Gen. Maxwell D. Taylor succeeds Gen. Van Fleet as commander of U. S. 8th Army in Korea.

Feb. 22—Gen. Clark proposes that sick and wounded prisoners be exchanged before armistice is signed; Reds accept Mar. 28.

Mar. 30—Reds propose that neutral nation be made custodian of all POWs refusing repatriation.

Apr. 20—Exchange of sick and wounded POWs begins; 684 U. N. prisoners returned by Apr. 26; 6,670 Red prisoners by May 3.

Apr. 26—Truce talks resumed at Panmunjom after 6½-month recess.

May 7—Reds agree to let reluctant prisoners stay in Korea after truce; propose 5-nation POW custodianship.

May 25—South Korean officials denounce truce arrangements.

June 8—Agreement on POWs reached at Panmunjom: India to head 5-nation commission for custodianship of POWs refusing repatriation.

June 18-21—Pres. Rhee frees 27,000 anti-Red POWs in defiance of U. N.-Red prisoner agreement; truce talks halted June 20.

July 10—Truce talks are resumed.

July 11—Rhee agrees to armistice terms acceptable to other Allies.

July 27—Armistice signed at Panmunjom.

Aug. 5-Sept. 6—POWs exchanged in "Operation Big Switch"; 12,760 released by Reds, 75,799 by U. N.; U. N. believes Reds hold many back.

Aug. 8—U. S. signs mutual security pact with Republic of Korea; \$1-billion rehabilitation aid to Korea contemplated.

Sept. 2—Dulles warns that U. S. may bomb Manchuria if war is renewed.

Sept. 4—Korean Communists release

Maj. Gen. William F. Dean, highest-ranking U. S. officer taken prisoner.

Sept. 21—North Korean pilot flies Russian MIG jet to Seoul; gets \$100,000 U. S. reward.

Sept. 24-23 American POWs who refuse repatriation are delivered to Indian custody.

Oct. 15—Reds try to persuade unwilling prisoners to return; few are persuaded.

Dec. 12—Panmunjom talks to arrange Korean peace conference broken off by U. S.

Dec. 23-21 U. S. POWs turn down repatriation; prefer communism.

(For later items, see News Record of 1954)

## U. N. Actions on Korean War

### 1950

June 27—Security Council (at that time boycotted by Russia) calls on U. N. members, to "furnish such assistance to the Republic of Korea as may be necessary to repel the armed attack."

### 1951

Jan. 13—U. N. votes new peace appeal; rejected by Red China Jan. 17.

Feb. 1—General Assembly condemns (44-7) Red China as an aggressor.

Feb. 7—U. N. rejects Russian charges of U. S. aggression against China.

May 18—U. N. votes (47-0) arms embargo against Red China; Soviet-bloc members refuse to vote.

June 23—Russia proposes truce.

### 1952

July 3-10 Security Council members vote in favor of U. S. resolution for International Red Cross investigation of Russia's charge of U. N. germ warfare in Korea; Russian veto kills it.

Dec. 3—Assembly approves (54-5) India's resolution to bring about truce by compromise of prisoner issue.

### 1953

Aug. 28—U. N. General Assembly votes (43-5) for "two-side" conference.

Sept. 13—Red China rejects U. N. plan for 2-sided political conference.

## World Peace Organizations

**T**WICE, nations hopefully have launched international associations to preserve peace by checking aggression and improving the welfare of backward areas of the world. The League of Nations failed, in part because of America's refusal to participate, in part because it did not possess the economic means by which to impose

sanctions on aggressor nations or help poor countries resolve their difficulties.

The United Nations is on firmer ground. The United States is fully committed to its responsibilities as a member; an International Bank and Monetary Fund exist and function; the U. N. has been able to intervene successfully to preserve peace in



the Near East and Middle Asia. Korea was the test; and the U. N. survives because the challenge of the Communists was taken up. Corrections are necessary in the U. N. Charter; notably, the right of veto by a Council member requires careful study. On the other hand, the mounting

prestige of the U. N. Assembly and the effective work of the Trusteeship Council are to be noted. The U. N. appears to have a better chance than the League of Nations, as men hope that war forever will be eliminated in the making of major decisions among the countries of the world.

## League of Nations

**1919**  
*June 28*—Covenant of League of Nations signed as Part I of Treaty of Versailles.  
*Nov. 19*—U. S. rejects Versailles Treaty.

**1920**  
*Jan. 10*—League of Nations officially inaugurated as Versailles Treaty goes into effect.  
*Jan. 16*—1st Council meeting in Paris. Permanent members: England, France, Italy, Japan. (Germany made permanent member 1926 upon admission to League; Russia, 1934.)  
*Mar. 19*—U. S. Senate vote lacks  $\frac{2}{3}$  majority to ratify Versailles Treaty.  
*May 19*—Persia (now Iran) presents 1st dispute to League: demands Russia get out of Azerbaijan. Russia does.  
*Nov. 15*—1st meeting of Assembly; 41 members (57 in 1934). Headquarters: Geneva, Switzerland.

**1922**  
*June 15*—1st meeting of Permanent Court of International Justice (World Court).

**1923**  
*Aug. 31*—Italy, blaming Greece for death of Italian on Greek border, seizes Corfu; League intervenes; Italy withdraws; Greece to pay indemnity.

**1931**  
*Sept. 18-19*—Japanese army occupies wide area of Manchuria; China appeals to League; report of Lytton Commission on Oct. 4, 1932, is generally unfavorable to Japan.

**1933**  
*Mar. 27*—Japan gives notice of quitting League (effective 1935).  
*Oct. 14*—Hitler's Germany gives notice of quitting League (effective 1935).

**1935**  
*Oct. 3*—Italy invades Ethiopia; League votes economic sanctions (effective Nov. 18) except for vital oil.

**1936**  
*Mar. 7*—Hitler breaks Versailles Treaty and Locarno Pact by remilitarizing Rhineland; League does nothing.

**1937**  
*Dec. 11*—Italy gives notice of quitting League (effective 1939).

**1939**  
*Dec. 14*—Soviet Russia expelled from League for invading Finland.

**1946**  
*Apr. 8-18*—Final Assembly session at Geneva dissolves League of Nations.

## United Nations

**1945**  
*June 26*—U. N. Charter signed; at San Francisco; goes into effect Oct. 24.  
*July 28*—U. S. Senate ratifies (89-2) U. N. Charter.

**1946**  
*Jan. 10*—1st meeting of General Assembly opens in London.  
*Jan. 17*—1st meeting of Security Council opens in London.  
*Jan. 19*—Iran presents 1st case to Security Council; demands Russia get out of Azerbaijan; Russia withdraws May 6.

*Feb. 2*—Trygve Lie installed as first U. N. Secretary General.

*Apr. 3*—1st meeting of International Court opens in The Hague (formal opening Apr. 18).

*Dec. 3*—Greece charges Albania, Bulgaria and Yugoslavia with aiding Communist rebels in northern part of Greece.

*Dec. 30*—U. N. Atomic Energy Commission recommends (10-0) U. S. control plan; Russia and Poland abstain.

**1947**  
*Aug. 1*—Security Council calls on Dutch and Indonesians to cease hostilities.

*Aug. 31*—U. N. investigating committee recommends Britain give up control of Palestine and that Arab and Jewish states be established.

*Nov. 14*—General Assembly votes commission to set up free government for all of Korea.

**1948**  
*Jan. 1*—India appeals to U. N. to stop alleged aggression by Pakistan in Kashmir.

*Jan. 17*—U. N. Good Offices Commission effects truce in Indonesia.

*Apr. 21*—Security Council votes plebiscite should be taken in Kashmir to decide whether province goes to India or Pakistan; both sides object.

*May 14*—Nation of Israel proclaimed; British end mandate at midnight; Arab armies attack.

*June 11*—U. N. appeal brings temporary truce in Palestine.

- June 22—Russian veto prevents Security Council from approving atomic control plan favored by majority.
- Aug. 15—Independent Republic of Korea is proclaimed, following election supervised by U. N.
- Nov. 4—General Assembly approves U. S.-sponsored atomic control plan.
- 1949**
- Feb. 24—Israel signs armistice with Egypt.
- May 11—U. N. admits Israel.
- Nov. 21—General Assembly decides on disposition of Italian colonies Libya and Somaliland; defers action on Eritrea.
- 1950**
- Jan. 13—Russia boycotts Security Council (until Aug. 1) because Red China was refused admittance to U. N.
- June 25—North Korean Communists invade Republic of Korea.
- June 27—Security Council calls on U. N. members to help repel North Korean aggression.
- 1951**
- Feb. 1—General Assembly condemns Red China as aggressor in Korea.
- May 18—General Assembly votes arms embargo against Communist China and North Korea.
- 1952**
- July 3—Russia vetoes Red Cross investigation of Russia's charge that U. S. wages germ warfare in Korea.
- 1953**
- Feb. 24—General Assembly resumes session recessed Dec. 22.
- Mar. 10—Trygve Lie tells U. N. that Soviet pressure caused him to resign.
- Apr. 10—Dag Hammarskjöld begins term as U. N. Secretary General.
- Apr. 22—U. N. asks Chinese Nationalists to leave north Burma.
- May 26—Sen. Taft says U. S. should forget U. N. in Asia.
- May 28—Eisenhower repudiates Taft's views; says U. S. cannot "go it alone."
- July 27—Korean armistice signed at Panmunjom.
- Aug. 17—U. N. meets to consider Korean political conference.
- Aug. 26—Dulles urges revision of U. N. Charter in 1955.
- Aug. 28—General Assembly votes U. S. plan for Korea conference; 16 belligerents plus South Korea to take part on U. N. side; India withdraws proposal to participate.
- Sept. 1—U. N. tribunal rules on firing by U. N. of 21 American employees suspected as Communists by Congressional investigators; finds 11 ousters illegal.
- (For later items, see News Record of 1954)

## Atomic Energy

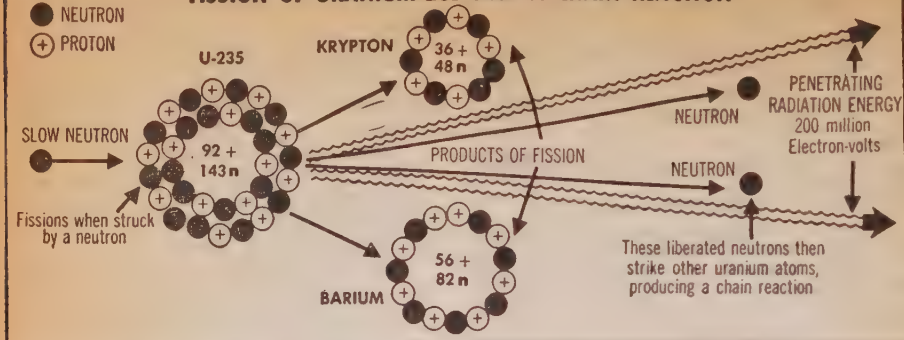
IN SEPTEMBER 1953, it was reported that the Soviet Union had exploded a hydrogen bomb. Within a month the United States Atomic Energy Commission announced it was embarking on a \$50,000,000 project to complete, in 3 years, a full-scale industrial nuclear power plant capable of furnishing 60,000 kilowatts of electric power, enough to supply the peacetime needs of a modern city of 100,000.

To understand the magnitude and importance of these major events, let us go back to a day late in 1938. In a university laboratory, a few miles from Hitler's Chancellery, outside Berlin, Otto Hahn and Fritz Strassmann performed an experiment that was to turn the world over on its head. They placed the metal uranium in the path of swiftly moving particles called neutrons, and reported the splitting or fission of the uranium atom, with the liberation of some energy from inside this atom. Lise Meitner, a Jewish scientist working with Hahn, was soon after forced to flee from the Nazis, and she passed the information on to Niels Bohr, Nobel prize winner, in Copenhagen. Shortly after, a scientific conference was held in Washing-

ton, D. C. Atomic physicists from our own universities and famous scientists from foreign countries attended. Niels Bohr was present, as well as Enrico Fermi, who had left Fascist Italy to work at Columbia University. Bohr suggested that the Germans had used an impure form of uranium containing several types (isotopes) of uranium atoms. It was uranium 235 (U-235) that was most sensitive to fission, said Bohr. If only this pure variety of uranium were used, much more powerful effects might be obtained. Fermi, too, made a crucial contribution. He suggested that in the fission of U-235 other neutrons might be expelled. These extra neutrons might attack other uranium atoms, which, in turn, would split still other uranium atoms, and this would continue until the whole mass of uranium had been annihilated. If this were true, the possibility of a chain, or self-propagating reaction, that would surely unlock the door to atomic energy, was close at hand.

Before this meeting ended, further researches confirmed the emission of such extra neutrons. By midsummer of 1940, the important facts regarding uranium fis-

## FISSION OF URANIUM-235 AND A CHAIN REACTION



sion had been discovered, and although a controlled chain reaction had not yet been achieved, its possibility was clear. Then, suddenly, World War II clamped tight the door of censorship on all research relating to the release of atomic energy. For 5 years, the outside world was kept in the dark about the vital research.

With the dropping of the first atomic bomb on Hiroshima in August 1945, the veil was partly lifted. Early in 1940, Roosevelt and Churchill had pooled the brains of American, British, and German and Hungarian refugee scientists on a research program, the like of which the world had never known. Its goal was the release of atomic energy for the production of a weapon with which to win the war against the Axis. Knowledge that research on such a weapon was being carried on in Nazi laboratories compelled quick, co-operative action. The race was on—the prize we wanted, a free world. The U. S. Government invested \$2 billion in "the greatest scientific gamble in history—and won."

The first controlled chain reaction was achieved on December 2, 1942, at the University of Chicago. The fissionable material used was U-235, laboriously separated at Oak Ridge, Tennessee, from the natural uranium mixture containing only about one part in 140 of the pure U-235. A second fissionable metal, plutonium, was also used. Plutonium was a new and synthetic element created in a flameless furnace called a nuclear reactor. Two such reactors were in operation during the war—one at Oak Ridge, the other at Richland, Washington. The Oak Ridge reactor is essentially a huge cube of graphite bricks containing a number of horizontal channels into which is placed the pure uranium fuel. Graphite is used to slow down neutrons and is called a moderator. (Heavy water is another good moderator.) Slow neutrons, moving at about one mile per second, are more effective in producing fission than are neutrons traveling at

normal speeds of about 10,000 miles per second. The bricks are built up in layers, and since the structure is erected by piling one layer of bricks upon another, it is often referred to as an atomic pile. A chain reaction is started by bombarding U-235 with some neutrons liberated by a bit of the metal beryllium mixed with radium in the center of the pile. Several changes take place inside the atoms, and the uranium finally ends up as plutonium. This is then separated from the uranium by chemical methods. The atomic pile liberates tremendous quantities of heat. Till recently this heat was wasted, since we were interested primarily in making plutonium for bombs. Now, for the first time, a nuclear power plant will be built for peaceful use. The heat of this atom furnace will be harnessed to change water into steam, which will drive a turbine-generator to produce electricity to warm our homes, power our factories, and activate our vacuum cleaners, washing machines and refrigerators.

To grasp the full meaning of atomic energy we must first understand the nature of matter. All matter is composed of atoms. An atom is a particle too small to be seen even through the most powerful microscope. It is about 1/250,000,000 of an inch in diameter. Even this tiny particle is complex in structure. Every atom, except that of ordinary hydrogen, is composed of electrons, protons and neutrons. The electrons, which are particles of negative electricity, are located in layers on the rim of the atom. The protons and neutrons, each about 2,000 times as heavy as an electron, are packed away in the center or nucleus of the atom. The diameter of the nucleus is only about 1/10,000 that of the whole atom. The proton is a particle of positive electricity, and the neutron is an electrically neutral particle. The total number of protons and neutrons in any element represents its atomic weight. For example, uranium has 92 protons and 143



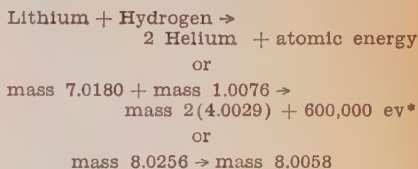
neutrons, and its atomic weight is 235. Each of the 92 natural elements and the 6 artificially created elements are composed of these 3 elementary particles.

During the burning of coal or the explosion of TNT, only the electrons of the atoms are involved. These merely change their positions. The nuclei of the atoms remain unchanged. However, some of the heavier elements, such as uranium, thorium and plutonium, behave differently. All of the 92 protons and 143 neutrons of the uranium atom, for example, are packed away in a sphere one millionth of a millionth of an inch in diameter. They are packed so tightly that the nucleus weighs more than 200 trillion times as much as an equal volume of water. All of these particles are in rapid vibration, and, in addition, all of its 92 protons carry positive charges which repel each other. The nucleus is thus under terrific tension, like a coiled spring ready to unleash its imprisoned energy. When uranium is placed in the path of a stream of neutrons emitted from beryllium exposed to a bit of radium, one of these swiftly moving neutrons gets through the outer barrier of electrons, enters the very center of the atom, disturbs this delicate balance within the nucleus, and disrupts it. As a result, the nucleus flies apart, the atom is shattered into two large pieces and several small fragments, neutrons are expelled, highly penetrating and lethal radiation similar to X-rays is liberated, and a tremendous volume of energy in the form of light and heat is released in a billionth of a second. Such a change is called *nuclear fission*.

The amount of energy liberated during the burning of one pound of coal (a chemical reaction) is only about 4 kilowatt-hours, enough to keep a single 100-watt electric light bulb burning for 40 hours. The energy liberated during the complete fission of the same weight of coal, if this were possible, is equivalent to 11 billion kilowatt-hours, enough to keep all the U. S. supplied with electricity for an en-

tire month. Where does this Niagara of energy come from? To answer this we must go back about 50 years. In 1905, Albert Einstein proposed that matter and energy are really one, and that matter could actually be converted into energy. He introduced the now familiar formula to express this idea:  $E = mc^2$ , in which  $E$  is energy in ergs,  $m$  is mass or matter in grams, and  $c$  is the speed of light in centimeters per second. When we recall that the speed of light is 30 billion centimeters per second, and that this figure must be multiplied by itself, we begin to realize what an astronomical number  $E$  must turn out to be. Einstein at that time, even before the proton and neutron had been discovered, theorized that this energy would come from inside the atom.

How? Let us see what happened in 1932 when two Englishmen, Cockcroft and Walton, bombarded the metal lithium with swiftly moving protons (neutrons had not yet been discovered). Some lithium disappeared, and a different element, helium, was formed, accompanied by much energy. This nuclear change may be expressed:



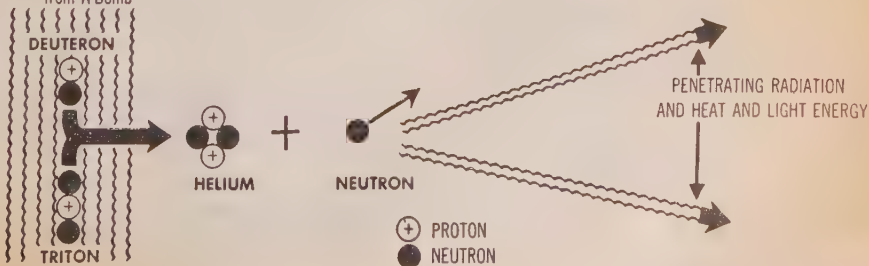
\* Electron-volts.

You will notice the whole is lighter than the sum of its parts. There is a loss of mass of about 0.02 units. This loss of mass is accounted for, in part, by the energy liberated. This demonstration was not very efficient, and there was no great or immediate excitement at the news. However, when 6 years later, U-235 was fissioned, science had stumbled upon a reaction that made possible the A-bomb.

Soon after the A-bomb, based on the

## FUSION OF DEUTERIUM AND TRITIUM IN A HYDROGEN BOMB

Temperature of 100,000,000° C.  
from A-Bomb



fission of uranium and plutonium, had been successfully exploded, American scientists went to work on another type of bomb, subsequently named the hydrogen or H-bomb. The principle of this weapon is somewhat different from that of the A-bomb. The energy of the H-bomb comes from the *fusion* of lighter atoms into a heavier one, rather than from the *fission* of a heavy element into lighter ones. Two isotopes of hydrogen are used. Isotopes are varieties of the same element having different atomic weights. Isotopes have the same number of electrons and protons but differ in the number of neutrons. For example, ordinary hydrogen has only one proton and no neutrons, and its atomic weight is, therefore, one. This means that its atom has a mass of one, since it is the lightest of the elements; and uranium-235 has an atomic weight of 235, since its atom is 235 times as heavy as one atom of hydrogen. Heavy hydrogen, called deuterium (D), has one neutron and one proton in its nucleus, and its mass is 2. Synthetic, superheavy hydrogen, called tritium (T), has 2 neutrons in its nucleus in addition to the one proton common to all forms of hydrogen, and its mass is 3.

The nuclei of deuterium and tritium are forced to merge or fuse. During this fusion the hydrogen is transmuted into the heavier element helium, whose atomic weight is 4 (it contains 2 neutrons and 2 protons). One neutron is liberated, and atomic energy is released in tremendous quantities, because in fusion, too, there is a loss of matter (7 times as great as in an A-bomb explosion). This thermonuclear reaction may be expressed:

Deuterium + Tritium →

Helium + neutron + atomic energy

For this nuclear reaction to take place, an enormously high temperature, hitherto found only in the sun, is necessary. The energy released during the creation of helium out of hydrogen is generally accepted today as the mechanism that produces and maintains the terrific heat of the sun. This temperature of about 100 million degrees Centigrade is needed for about 1 millionth of a second to get the fusion going. With the development of the A-bomb, such a temperature became available here on earth. During the fission of uranium and plutonium in the A-bomb, central temperatures as high as 150 million degrees Centigrade are produced. The explosion of the A-bomb thus acts as a trigger for the H-bomb. The hydrogen bomb probably contains plutonium and uranium, as well as deuterium and tritium. This double-bomb explosion can be made to release almost unlimited energy since, unlike the uranium bomb, the hydrogen bomb is not restricted to the narrow limits of a specific or critical size of the A-bomb. It has been estimated that one H-bomb will increase the radius of destruction of an A-bomb of equal weight about 10 times. It could extinguish the lives of millions of people in one blow. It could devastate an area of 300 square miles by blast and 1,200 square miles by fire, compared with an area of about 10 or 15 square miles which is vulnerable to an A-bomb.

We now live in an age of peril, for such a holocaust can strike mankind.

#### 1945

July 16—A-bomb test at Alamogordo, N. Mex. (announced Aug. 6).

Aug. 6—Hiroshima A-bombed; Nagasaki, Aug. 9.

#### 1946

July 1—Underwater bombing at Bikini. (Repeated July 25.)

Aug. 1—U. S. Atomic Energy Commission created.

#### 1947

Jan. 1—U. S. transfers control of domestic atomic energy from Army to civilian commission.

Apr. 9—Senate confirms (50-31) nomination of David E. Lillenthal.

#### 1949

Sept. 24—Truman discloses recent atomic explosion in Russia.

#### 1950

Jan. 31—Truman orders development of hydrogen super-bomb.

#### 1951

Aug. 21—U. S. orders construction of world's 1st atomic submarine.

Oct. 3—Truman announces Russia has exploded 2nd atom bomb.

Oct. 30—Atom-data bill authorizes exchange of certain nonweapon atom data with friendly nations.

Dec. 29—U. S. Atomic Energy Commission announces production of electric energy from atomic energy.

#### 1952

Apr. 22—Troops enter atomic blast area for 1st time in Nevada test.

Oct. 3—Britain sets off 1st atomic explosion.

Nov. 16—AEC announces "satisfactory" experiments in hydrogen-weapons research; eye witnesses tell of blasts near Eniwetok.

#### 1953

Mar. 24—9 military volunteers unhurt after A-blast test 2,500 yds. away.

Aug. 20—Russia announces she exploded hydrogen bomb Aug. 12.

(For later items, see News Record of 1954)

# Significant Changes in Political Status Since 1945

## EUROPE

Country	Previous Status	Present Status	Date
Albania	Monarchy	Republic†	1946
Bulgaria	Monarchy	Republic†	1946
Czechoslovakia	Republic	Republic†	1948
Germany	Under Allied Control Council	Divided*	1948
Hungary	Nominal Monarchy	Republic†	1946
Ireland	British Dominion	Republic	1949
Italy	Monarchy	Republic	1946
Poland	Republic	Republic†	1945
Rumania	Monarchy	Republic†	1947
Saar	Part of French Occupation Zone under Allied Control Council	Autonomous (subject to reserved powers of France)	1950
Trieste	Under temporary Yugoslav and Allied Control	Free Territory under U.N. protection†	1947
Yugoslavia	Republic†	Republic§	1948

\* German Federal Republic (West Germany) and Communist controlled German Democratic Republic (East Germany). † U.S. and Britain have announced a decision to withdraw their occupation forces in Northern Trieste in favor of Italy. ‡ Communist controlled. § Still Communist but has broken with U.S.S.R.

## ASIA

Country	Previous Status	Present Status	Date
Burma	Member of British Commonwealth	Republic	1948
China	Republic	Republic <sup>1</sup>	1949
Ceylon	British Crown Colony	British Dominion	1948
Formosa	Dependency of Japan	Province of China	1945
India	British Dominion	Republic <sup>2</sup>	1947 & 1950
Indo-China	French Colony	Divided <sup>3</sup>	1954
Indonesia	Part of Netherlands Indies	Republic	1949
Israel	Part of British Mandate of Palestine	Republic	1948
Korea	Dependency of Japan	Divided <sup>4</sup>	1948
Pakistan	Part of India	British Dominion	1947
Palestine	British Mandate	Partitioned <sup>5</sup>	1950
Philippines	Transition to complete independence	Republic	1946

<sup>1</sup> Communist controlled. <sup>2</sup> Within the British Commonwealth. <sup>3</sup> Associated States of French Union (south part) and Vietnam (Communist controlled) (north part), as provided in Geneva Armistice signed July 21, 1954. <sup>4</sup> North Korean People's Republic (Communist controlled) and Republic of Korea (South Korea). Armistice signed at Panmunjom on July 21, 1953, ended war between North and South Korea. <sup>5</sup> Between Israel and Jordan.

## AFRICA

Country	Previous Status	Present Status	Date
Algeria	Part of Metropolitan France	3 Overseas Departments of France	1946
A.-E. Sudan	Condominium	Transitionary*	1953
Egypt	Monarchy	Republic	1953
Libya	Italian Colony†	Monarchy	1951
Morocco	French Protectorate	French Associated State	1946
Suez Canal Zone	Protected by British forces	British troops to be withdrawn within 20 mos.	1954
Tunisia	French Protectorate	French Associated State	1946

3-yr. transition to self-determination. † Occupied by Britain.



# Line-Up of Nations

## WORLD WAR I

Allies			Central Powers
Belgium	Guatemala	Panamá	Austria-Hungary
Brazil	Haiti	Portugal	Bulgaria
China	Honduras	Rumania	Germany
Costa Rica	Italy	Russia	Turkey
Cuba	Japan	Serbia	
France	Liberia	Siam	
Great Britain	Montenegro	United States	
Greece	Nicaragua		

## WORLD WAR II

The United Nations*			The Axis
Argentina	Ethiopia	Norway	Albania
Australia	France	Panamá	Bulgaria
Belgium	Greece	Paraguay	Finland
Bolivia	Guatemala	Peru	Germany
Brazil	Haiti	Philippines	Hungary
Canada	Honduras	Poland	Italy
Chile	India	Saudi Arabia	Japan
China	Iran	Syria	Rumania
Colombia	Iraq	Turkey	Slovakia
Costa Rica	Lebanon	Un. of So. Africa	Thailand
Cuba	Liberia	United Kingdom	
Czechoslovakia	Luxemburg	United States	
Denmark	Mexico	U.S.S.R.	
Dominican Republic	Netherlands	Uruguay	
Ecuador	New Zealand	Venezuela	
El Salvador	Nicaragua	Yugoslavia	

\*Italy became a co-belligerent in 1944.

## THE COLD WAR

Anti-Communist Nations			Communist Nations
North Atlantic Treaty Organization			Europe
Belgium	Iceland	Portugal	Albania
Canada	Italy	Turkey	Bulgaria
Denmark	Luxemburg	United Kingdom	Czechoslovakia
France	Netherlands	United States	German Democratic Republic (East)
Greece	Norway		Hungary
European Defense Community*			Poland
Belgium	German Federal Republic (West)	Luxemburg	Rumania
France	Italy	Netherlands	U.S.S.R.
Anzus Council			Asia
Australia	New Zealand	United States	China
			Korean People's Republic (North)
			Mongolian People's Republic
			Tibet (actually part of Communist China)

\*Not yet ratified as of Nov. 1, 1953.

# ★ WHO'S WHO ★

*Prepared by*

A. N. MARQUIS CO., Publishers of WHO'S WHO IN AMERICA

Locations and dates are those of birth. A name in parentheses is the original name or form of the name of the individual.

The vital statistics offered in this section have been gathered from various sources, including the subjects thereof, but neither *Who's Who in America* nor the *Information Please Almanac* can guarantee the accuracy of each individual item. We have learned to accept the date and place of birth that any lady or gentleman claims for herself or himself and not argue about it. Where we have not been able to learn the date and place of birth, we have not attempted to invent the items.

See Page 455 for individuals currently active in U. S. government.

- ABBOTT, Bud (William) (actor); Asbury Park, N. J., Oct. 2, 1898.
- ABBOTT, George (director & dramatist); Forestville, N. Y., June 25, 1889.
- ABEL, Walter (actor); St. Paul, Minn., June 6, 1898.
- ACHESON, Dean (U. S. statesman); Middletown, Conn., Apr. 11, 1893.
- ADAMS, Franklin P. (author); Chicago, Ill., Nov. 15, 1881.
- ADAMS, Jack (hockey executive); Ft. William, Ont., Can., June 14, 1895.
- ADAMS, Samuel Hopkins (novelist); Dunkirk, N. Y., Jan. 26, 1871.
- ADDAMS, Charles (cartoonist); Westfield, N. J., Jan. 7, 1912.
- ADENAUER, Konrad (German statesman); Cologne, Ger., Jan. 5, 1876.
- ADLER, Larry (harmonica player); Baltimore, Md., Feb. 10, 1914.
- ADLER, Luther (actor); New York City, May 4, 1903.
- ADLER, Mortimer J. (philosopher); New York City, Dec. 28, 1902.
- AHERNE, Brian (actor); Kings Norton, Eng., May 2, 1902.
- AIKEN, Conrad (poet); Savannah, Ga., Aug. 5, 1889.
- AKINS, Zoë (dramatist); Humansville, Mo., Oct. 30, 1886.
- ALBERT, Eddie (Eddie Albert Heimberger) (actor); Rock Island, Ill., Apr. 22, 1908.
- ALDA, Robert (actor); New York City, Feb. 26, 1914.
- ALDINGTON, Richard (poet); Hampshire, Eng., 1892.
- ALI, Mohammed (Pakistani statesman); Barisal, E. Bengal, Oct. 19, 1909.
- ALLEN, Fred (John F. Sullivan) (comedian); Cambridge, Mass., May 31, 1894.
- ALLEN, Gracie (comedienne); San Francisco, Calif., July 26, 1906.
- ALLEN, Steve (comedian); New York City, Dec. 26, 1921.
- ALLYSON, June (Jan Allyson) (actress); New York City, Oct. 7, 1923.
- AMECHE, Don (actor); Kenosha, Wis., May 31, 1908.
- AMORY, Cleveland (author); Nahant, Mass., Sept. 2, 1917.
- AMOS (Freeman F. Gosden) (actor); Richmond, Va., May 5, 1899.
- ANDERS, Glen (actor); Los Angeles, Calif., Sept. 1, 1890.
- ANDERSON, Eddie. *See* Rochester.
- ANDERSON, Judith (actress); Adelaide, Austr., Feb. 10, 1898.
- ANDERSON, Marian (contralto); Philadelphia, Pa., Feb. 17, 1902.
- ANDERSON, Maxwell (dramatist); Atlantic, Pa., Dec. 15, 1888.
- ANDREWS, Dana (actor); Collins, Miss., Jan. 1, 1912.
- ANDREWS, Laverne (singer); Minneapolis, Minn., July 6, 1915.
- ANDREWS, Maxene (singer); Minneapolis, Minn., Jan. 3, 1918.
- ANDREWS, Patricia (singer); Minneapolis, Minn., Feb. 16, 1920.
- ANDREWS, Roy Chapman (zoologist & explorer); Beloit, Wis., Jan. 26, 1884.
- ANDY (Charles J. Correll) (actor); Peoria, Ill., Feb. 2, 1890.
- ANGELI, Pier (actress); Cagliari, It., June 19, 1932.

- ANSERMET, Ernest (orchestra conductor); Vevey, Vaud, Switz., Nov. 11, 1883.
- ARAGON, Louis (poet); France, 1895.
- ARCARO, Eddie (jockey); Cincinnati, Ohio, Feb. 19, 1916.
- ARCHIPENKO, Alexander (sculptor); Kiev, Rus., May 30, 1887.
- ARDEN, Eve (Eunice Quedens) (actress); Mill Valley, Calif.
- ARLEN, Harold (Hyman Arluck) (composer); Buffalo, N. Y., Feb. 15, 1905.
- ARMSTRONG, Henry (boxer); St. Louis, Mo., Dec. 12, 1912.
- ARMSTRONG, Louis (trumpeter); New Orleans, La., July 4, 1900.
- ARNAZ, Desi (Desiderio) (actor & band leader); Santiago, Cuba, Mar. 2, 1917.
- ARNO, Peter (cartoonist); New York City, Jan. 8, 1904.
- ARNOLD, Edward (actor); New York City, Feb. 18, 1890.
- ARRAU, Claudio (pianist); Chillan, Chile, Feb. 6, 1904.
- ARTHUR, Jean (Gladys Greene) (actress); New York City, Oct. 17, 1908.
- ASCH, Sholem (novelist); Kutno, Pol., Nov. 1, 1880.
- ASTAIRE, Fred (Frederick Austerlitz) (dancer); Omaha, Nebr., May 10, 1899.
- ATKINSON, Ted (jockey); Toronto, Ont., Can., June 17, 1916.
- ATLEE, Clement R. (British statesman); London, Eng., Jan. 3, 1883.
- AUDEN, Wystan Hugh (poet); York, Eng., Feb. 21, 1907.
- AUER, Mischa (actor); Petrograd, Rus., Nov. 17, 1905.
- AURIOL, Vincent (French statesman); Revel, Fr., Aug. 27, 1884.
- AUSTIN, Warren R. (U. S. statesman); Highgate, Vt., Nov. 12, 1877.
- AUTRY, Gene (actor); Tloga, Tex., Sept. 29, 1907.
- AVERY, Sewell L. (Business Executive); Saginaw, Mich., Nov. 4, 1873.
- AYRES, Lew (actor); Minneapolis, Minn., Dec. 28, 1908.
- BACALL, Lauren (actress); New York City, Sept. 16, 1924.
- BACCALONI, Salvatore (basso); Rome, It., Apr. 14, 1900.
- BAER, Max (boxer); Omaha, Nebr., Feb. 11, 1909.
- BAILEY, Pearl (singer); Newport News, Va., 1918.
- BAINTER, Fay (actress); Los Angeles, Calif., 1893.
- BAKER, Josephine (singer); St. Louis, Mo., 1907.
- BAKER, Kenny (singer); Monrovia, Calif., Sept. 30, 1912.
- BALANCHINE, George (ballet director); St. Petersburg, Rus., Jan. 9, 1904.
- BALDWIN, Faith (novelist); New Rochelle, N. Y., Oct. 1, 1893.
- BALL, Lucille (actress); Jamestown, N. Y., Aug. 6, 1911.
- BAMPTON, Rose (contralto); Cleveland, Ohio, Nov. 28, 1909.
- BANKHEAD, Tallulah (actress); Huntsville, Ala., Jan. 31, 1903.
- BAO DAI (Việt-Nam ruler); Annam, Indo-China, Oct. 22, 1913.
- BARBER, Samuel (composer); West Chester, Pa., Mar. 9, 1910.
- BARBIROLI, Sir John (orchestra conductor); London, Eng., Dec. 2, 1899.
- BARKER, Lex (actor); Rye, N. Y., May 8, 1919.
- BARKLEY, Alben W. (U. S. statesman); Graves Co., Ky., Nov. 24, 1877.
- BARLOW, Howard (orchestra conductor); Plain City, Ohio, May 1, 1892.
- BARRYMORE, Ethel (actress); Philadelphia, Pa., Aug. 15, 1879.
- BARRYMORE, Lionel (actor); Philadelphia, Pa., Apr. 28, 1878.
- BARTHELMESS, Richard (actor); New York City, May 9, 1897.
- BARTHOLOMEW, Freddie (actor); London, Eng., Mar. 28, 1924.
- BARTON, James (actor); Gloucester, N. J., Nov. 1, 1890.
- BARUCH, Bernard (financier); Camden, S. C., Aug. 19, 1870.
- BASIE, Count (William) (band leader); Red Bank, N. J., Aug. 21, 1906.
- BACHELOR, Clarence Daniel (cartoonist); Osage City, Kans.
- BATISTA y ZALDÍVAR, Fulgencio (Cuban statesman); Banos, Cuba, Jan. 16, 1901.
- BAUDOUIN (King of Belgium); Palace of Laeken, Belg., Sept. 7, 1930.
- BAUGH, Sammy (football player); Temple, Tex., Mar. 17, 1914.
- BAUM, Vicki (novelist); Vienna, Aus., Jan. 24, 1896.
- BAXTER, Anne (actress); Michigan City, Ind., May 7, 1923.
- BAZIOTES, William (painter); Pittsburgh, Pa., June 11, 1912.
- BEEBE, William (zoologist); Brooklyn, N. Y., July 29, 1877.
- BEECHAM, Sir Thomas (orchestra conductor); St. Helens, Eng., Apr. 29, 1879.
- BEERBOHM, Sir Max (novelist); London, Eng., Aug. 24, 1872.
- BEHRMAN, Samuel N. (dramatist); Worcester, Mass., June 9, 1893.



- BELL, Bert (football executive); Philadelphia, Pa., Feb. 25, 1894.
- BELLAMY, Ralph (actor); Chicago, Ill., June 17, 1905.
- BEMELMANS, Ludwig (essayist); Meran, Tirol, Apr. 27, 1898.
- BENDIX, William (actor); New York City, Jan. 14, 1906.
- BEN-GURION, David (Israeli statesman); Plónsk, Pol., Oct. 16, 1886.
- BENNETT, Constance (actress); New York City, Oct. 22, 1908.
- BENNETT, Joan (actress); Palisades, N. J., Feb. 27, 1910.
- BENNETT, Robert Russell (composer); Kansas City, Mo., June 15, 1894.
- BENNY, Jack (Benny Kubelsky) (comedian); Waukegan, Ill., Feb. 14, 1894.
- BENTON, Thomas Hart (painter); Neosho, Mo., Apr. 15, 1889.
- BERGEN, Edgar (ventriloquist); Chicago, Ill., Feb. 16, 1903.
- BERGMAN, Ingrid (actress); Stockholm, Swed., 1917.
- BERGNER, Elisabeth (actress); Vienna, Aus., Aug. 22, 1900.
- BERLE, Milton (Milton Berlinger) (comedian); New York City, July 12, 1908.
- BERLIN, Irving (Isidore Baline) (song writer); Temun, Russia, May 11, 1888.
- BERNSTEIN, Leonard (composer & conductor); Lawrence, Mass., Aug. 25, 1918.
- BERRA, Yogi (Lawrence) (baseball player); St. Louis, Mo., May 12, 1925.
- BERRYMAN, James T. (cartoonist); Washington, D. C., June 8, 1902.
- BEST, Edna (actress); Hove, Sussex, Eng., Mar. 3, 1900.
- BETTIS, Valerie (actress & dancer); Houston, Tex.
- BEVAN, Aneurin (British statesman); Tredegar, Eng., Nov. 1897.
- BICKFORD, Charles (actor); Cambridge, Mass.
- BIDAULT, Georges (French statesman); Moulins, Fr., Oct. 5, 1899.
- BIGLEY, Isabel (actress); New York City, Feb. 23, 1928.
- BING, Rudolf (opera executive); Vienna, Aus., Jan. 9, 1902.
- BJOERLING, Jussie (tenor); Stora Tuna Dalarna, Swed., Feb. 2, 1911.
- BLACK, Frank (orchestra conductor); Philadelphia, Pa., Nov. 28, 1894.
- BLACK, Hugo L. (U. S. jurist); Harlan, Ala., Feb. 27, 1886.
- BLACKMER, Sidney (actor); Salisbury, N. C., July 13, 1898.
- BLAIK, Earl H. (football coach); Detroit, Mich., Feb. 15, 1897.
- BLAINE, Vivian (actress); Newark, N. J., Nov. 21, 1921.
- BLAIR, Janet (actress); Blair, Pa.
- BLITZSTEIN, Marc (composer); Philadelphia, Pa., Mar. 2, 1905.
- BLOCH, Ernest (composer); Geneva, Switz., July 24, 1880.
- BLOCK, Herbert L. *See* Herblock.
- BLONDELL, Joan (actress); New York City, Aug. 30, 1909.
- BLUME, Peter (painter); Russia, 1906.
- BLYTH, Ann (actress); Mt. Kisco, N. Y., Aug. 16, 1928.
- BOGART, Humphrey (actor); New York City, Dec. 25, 1900.
- BOHR, Niels (physicist); Copenhagen, Den., Oct. 7, 1885.
- BOLGER, Ray (actor); Dorchester, Mass., Jan. 10, 1906.
- BONDI, Beulah (actress); Chicago, Ill., May 3, 1892.
- BONELLI, Richard (Richard Bunn) (baritone); Port Byron, N. Y.
- BOOTH, Shirley (Thelma Booth Ford) (actress); New York City, Aug. 30, 1907.
- BORGE, Victor (pianist & comedian); Copenhagen, Den., Jan. 3, 1909.
- BORI, Lucrezia (Lucrecia Borja González de Riancho) (soprano); Valencia, Sp., Dec. 24, 1887.
- BORZAGE, Frank (movie director); Salt Lake City, Utah, Apr. 23, 1893.
- BOSTWICK, Pete (George H.) (polo player); New York City, Aug. 14, 1909.
- BOSWELL, Connie (singer); New Orleans, La., Dec. 3.
- BOTTOME, Phyllis (novelist); Rochester, Eng., May 31, 1884.
- BOUDREAU, Lou (baseball manager); Harvey, Ill., July 17, 1917.
- BOWEN, Catherine Drinker (biographer); Haverford, Pa., Jan. 1, 1897.
- BOWEN, Elizabeth (novelist); Dublin, Ire., June 7, 1899.
- BOWLES, Paul (novelist); New York City, Dec. 30, 1910.
- BOYD, William (actor); Cambridge, Ohio, June 5, 1898.
- BOYER, Charles (actor); Figeac, Fr., Aug. 28, 1899.
- BOYLE, Kay (novelist & poet); St. Paul, Minn., Feb. 19, 1903.
- BRACKEN, Eddie (actor); Astoria, N. Y., Feb. 7, 1920.
- BRADDOCK, James J. (boxer); North Bergen, N. J., Dec. 6, 1905.
- BRADLEY, Omar N. (U. S. general); Clark, Mo., Feb. 12, 1893.

- BRAILOWSKY, Alexander (pianist); Kiev, Rus., Feb. 16, 1896.
- BRANDO, Marlon (actor); Omaha, Nebr., Apr. 3, 1924.
- BRANGWYN, Sir Frank (painter); Bruges, Belg., May 13, 1867.
- BRANZELL, Karin (contralto); Stockholm, Swed., Sept. 24, 1891.
- BRAQUE, Georges (painter); Argenteuil, Fr., May 13, 1882.
- BRENNAN, Walter (actor); Lynn, Mass., July 25, 1894.
- BRENT, Romney (Romulo Larraide) (actor); Satillo, Mex., Jan. 26, 1902.
- BRICE, Carol (contralto); Indianapolis, Ind., Apr. 16, 1918.
- BRITTEN, Benjamin (composer); Lowestoft, Eng., Nov. 22, 1913.
- BROMFIELD, Louis (novelist); Mansfield, Ohio, Dec. 27, 1896.
- BROOK, Alexander (painter); Brooklyn, N. Y., July 14, 1898.
- BROOKS, Van Wyck (literary critic); Plainfield, N. J., Feb. 16, 1886.
- BROUGH, A. Louise (tennis player); Oklahoma City, Okla., Mar. 11, 1923.
- BROWN, Cecil (radio commentator); New Brighton, Pa., Sept. 14, 1907.
- BROWN, Joe E. (actor); Holgate, Ohio, July 28, 1892.
- BROWN, John Mason (drama critic); Louisville, Ky., July 3, 1900.
- BROWN, Pamela (actress); London, Eng., July 8, 1918.
- BROWN, Paul E. (football coach); Norwalk, Ohio, Sept. 7, 1908.
- BROWN, Vanessa (Smylla Brind) (actress); Vienna, Aus., Mar. 24, 1928.
- BROWNE, John (baritone); Geelong, Austr., Jan. 7, 1901.
- BRUCE, Carol (singer); Great Neck, N. Y., Nov. 15, 1919.
- BRUNDAGE, Avery (sports executive); Detroit, Mich., Sept. 28, 1887.
- BRYSON, Lyman (educator); Valentine, Nebr., July 12, 1888.
- BUCK, Pearl S. (novelist); Hillsboro, W. Va., June 26, 1892.
- BUDGE, J. Donald (tennis player); Oakland, Calif., June 13, 1915.
- BURCHFIELD, Charles E. (watercolorist); Ashtabula, Ohio, Apr. 9, 1893.
- BURKE, Billie (actress); Washington, D. C., Aug. 7, 1886.
- BURNS, George (Nathan Birnbaum) (comedian); New York City, Jan. 20, 1896.
- BURNS, Tommy (Noah Brusso) (boxer); Hanover, Can., June 17, 1881.
- BURROWS, Abe (comedian & gag writer); New York City, Dec. 18, 1910.
- BURTON, Harold H. (U. S. jurist); Jamaica Plain, Mass., June 29, 1888.
- BURTON, Richard (actor); Wales, 1926.
- BUSH, Vannevar (engineer); Everett, Mass., Mar. 11, 1890.
- BUSHNELL, Asa S. (sports executive); Springfield, Ohio, Feb. 1, 1900.
- BUTLER, Richard Austen (British statesman); Attock Serai, India, Dec. 9, 1902.
- BUTTONS, Red (Aaron Chwatt) (comedian); New York City, Feb. 5, 1919.
- BYRD, Richard E. (explorer); Winchester, Va., Oct. 25, 1888.
- CABELL, James Branch (novelist); Richmond, Va., Apr. 14, 1879.
- CADMUS, Paul (painter & etcher); New York City, Dec. 17, 1904.
- CAESAR, Sid (comedian); Yonkers, N. Y., Sept. 8, 1922.
- CAGNEY, James (actor); New York City, July 17, 1904.
- CAIN, James M. (novelist); Annapolis, Md., July 1, 1892.
- CALDER, Alexander ("mobile" sculptor); Lawnton, Pa., July 22, 1898.
- CALDWELL, Erskine (novelist); White Oak, Ga., Dec. 17, 1903.
- CALDWELL, Taylor (novelist); Preswiche, Eng., Sept. 7, 1900.
- CALHERN, Louis (actor); New York City, 1895.
- CALLOWAY, Cab (band leader); Rochester, N. Y., Dec. 25, 1907.
- CALVET, Corinne (actress); Paris, Fr., Apr. 30, 1926.
- CAMPANELLA, Roy (baseball player); Homestead, Pa., Nov. 19, 1921.
- CAMUS, Albert (novelist); Algiers, 1913.
- CANBY, Henry Seidel (literary critic); Wilmington, Del., Sept. 6, 1878.
- CANIFF, Milton (cartoonist); Hillsboro, Ohio, Feb. 28, 1907.
- CANOVA, Judy (actress); Jacksonville, Fla., Nov. 20, 1916.
- CANTOR, Eddie (Edward Iskowitz) (comedian); New York City, Jan. 31, 1892.
- CAPOTE, Truman (novelist); New Orleans, La., Sept. 30, 1924.
- CAPP, Al (cartoonist); New Haven, Conn., Sept. 28, 1909.
- CAPRA, Frank (movie director); Palermo, Sicily, May 18, 1897.
- CAREY, MacDonald (actor); Sioux City, Iowa, Mar. 15, 1913.
- CARLE, Frankie (pianist); Providence, R. I., Mar. 15, 1903.
- CARLSON, Richard (actor); Albert Lea, Minn., Apr. 29, 1912.

- CARMICHAEL, Hoagy (song writer); Bloomington, Ind., Nov. 22, 1899.
- CARNOVSKY, Morris (actor); St. Louis, Mo., 1898.
- CARON, Leslie (actress); Paris, Fr., July 1.
- CARRADINE, John (actor); New York City, Feb. 5, 1906.
- CARROLL, John (painter); Wichita, Kans., Aug. 14, 1892.
- CARROLL, Leo G. (actor); Weedon, Eng.
- CARROLL, Madeleine (actress); Bromwich, Eng., Feb. 26, 1909.
- CARROLL, Paul Vincent (dramatist); Dundalk, Ire., July 10, 1900.
- CARSON, Jack (actor); Carman, Can., Oct. 27, 1910.
- CARSON, Rachel (science writer); Springdale, Pa., May 27, 1907.
- CARY, Joyce (novelist); Londonderry, Ire., Dec. 7, 1888.
- CASADESUS, Robert (pianist); Paris, Fr., Apr. 7, 1899.
- CASALS, Pablo (cellist); Vendrell, Sp., Dec. 29, 1876.
- CASSIDY, Marshall (horse race executive); Washington, D. C., Feb. 21, 1892.
- CASTAGNA, Bruna (contralto); Milan, It., Oct. 15, 1908.
- CAVALLERO, Carmen (band leader); New York City, May 6, 1913.
- CHAGALL, Marc (painter); Vitebsk, Rus., July 7, 1887.
- CHAMPION, Gower (dancer & actor); Geneva, Ill., June 22.
- CHAMPION, Marge (dancer & actress); Los Angeles, Calif., Sept. 2.
- CHANDLER, Jeff (Ira Grossel) (actor); Brooklyn, N. Y., Dec. 15, 1918.
- CHANNING, Carol (comedienne); Seattle, Wash., Jan. 31, 1921.
- CHAPLIN, Charles (comedian); London, Eng., Apr. 16, 1889.
- CHARLES, Ezzard (boxer); Atlanta, Ga., July 7, 1921.
- CHARISSE, Cyd (Tula Finklea) (actress, dancer); Amarillo, Tex., Mar. 8, 1923.
- CHASE, Ilka (actress); New York City, Apr. 8, 1905.
- CHASE, Stuart (economist); Somersworth, N. H., Mar. 8, 1888.
- CHASINS, Abram (pianist); New York City, Aug. 17, 1903.
- CHAVEZ, Carlos (composer); near Mexico City, Mex., June 13, 1899.
- CHEVALIER, Maurice (actor); Paris, Fr., Sept. 12, 1888.
- CHIANG Kai-shek (Chinese statesman); Feng-hwa, China, Oct. 31, 1887.
- CHIRICO, Giorgio de (painter); Volo, Gr., July 10, 1888.
- CHOU En-lai (Chinese statesman); Huaiyin, China, 1898.
- CHRISTIAN, Linda (actress); Tampico, Mex., 1925.
- CHRISTIE, Agatha (novelist); Torquay, Eng., 1892.
- CHURCHILL, Sarah (actress); London, Eng., Oct. 7, 1914.
- CHURCHILL, Sir Winston S. (British statesman); Oxfordshire, Eng., Nov. 30, 1874.
- CLAIR, René (René Chomette) (movie director); Paris, Fr., Nov. 11, 1898.
- CLAIRE, Ina (Ina Fagan) (actress); Washington, D. C., Oct. 15, 1892.
- CLARK, Bobby (comedian); Springfield, Ohio, June 16, 1888.
- CLARK, Dane (actor); New York City, Feb. 18, 1915.
- CLARK, Thomas C. (U. S. jurist); Dallas, Tex., Sept. 23, 1899.
- CLIFT, Montgomery (actor); Omaha, Nebr., Oct. 17, 1920.
- CLOETE, Stuart (novelist); Paris, Fr., July 23, 1897.
- CLOONEY, Rosemary (singer); Maysville, Ky.
- CLURMAN, Harold (stage director); New York City, Sept. 18, 1901.
- COBB, Lee J. (actor); New York City, Dec. 8, 1911.
- COBB, Ty (Tyrus R.) (baseball player); Banks Co., Ga., Dec. 17, 1886.
- COBURN, Charles (actor); Savannah, Ga., June 19, 1877.
- COCA, Imogene (comedienne); Philadelphia, Pa.
- COCTEAU, Jean (poet & dramatist); Maisons-Laffitte, Fr., July 5, 1891.
- COFFIN, Robert P. T. (poet); Brunswick, Maine, Mar. 18, 1892.
- COLBERT, Claudette (Lily Chauchoin) (actress); Paris, Fr., Sept. 13, 1905.
- COLLINGE, Patricia (actress); Dublin, Ire., Sept. 20, 1894.
- COLMAN, Ronald (actor); Richmond, Eng., Feb. 9, 1891.
- COLONNA, Jerry (comedian); Boston, Mass., Mar. 25, 1903.
- COLUM, Padraic (poet & dramatist); Longford, Ire., Dec. 8, 1881.
- COMMAGER, Henry S. (historian); Pittsburgh, Pa., Oct. 25, 1902.
- COMO, Perry (Pierino) (singer); Canonsburg, Pa., May 18, 1913.
- COMPTON, Arthur H. (physicist); Wooster, Ohio, Sept. 10, 1892.
- CONNALLY, Thomas T. (U. S. legislator); McLennan Co., Tex., Aug. 19, 1877.



- CONNELLY, Marc (dramatist); McKeesport, Pa., Dec. 13, 1890.
- CONNOLLY, Maureen (tennis player); San Diego, Calif., Sept. 17, 1934.
- CONROY, Frank (actor); Derby, Eng., Oct. 14, 1890.
- CONTE, Richard (actor); New York City, Mar. 24, 1914.
- COOGAN, Jackie (actor); Los Angeles, Calif., Oct. 26, 1914.
- COOK, Donald (actor); Portland, Oreg., Sept. 26, 1901.
- COOKE, Alistair (news commentator); Manchester, Eng., Nov. 20, 1908.
- COOPER, Gary (Frank) (actor); Helena, Mont., May 7, 1901.
- COOPER, Jackie (actor); Los Angeles, Calif., Sept. 15, 1922.
- COPLAND, Aaron (composer); Brooklyn, N. Y., Nov. 14, 1900.
- CORBETT, Leonora (actress); London, Eng., June 28, 1908.
- CORBINO, Jon (painter); Vittoria, It., Apr. 3, 1905.
- COREY, Wendell (actor); Dracut, Mass., Mar. 20, 1914.
- CORNELL, Katharine (actress); Berlin, Ger., Feb. 16, 1898.
- CORRELL, Charles J. *See* Andy.
- CORTOT, Alfred (pianist); Nyon, Fr., Sept. 26, 1877.
- CORWIN, Norman (radio dramatist); Boston, Mass., May 3, 1910.
- COSTAIN, Thomas Bertram (novelist); Brantford, Ont., Can., May 8, 1885.
- COSTELLO, Lou (Louis Cristillo) (actor); Paterson, N. J., Mar. 6, 1908.
- COTTEN, Joseph (actor); Petersburg, Va., 1905.
- COTY, René (French statesman); Le Havre, Fr., Mar. 20, 1882.
- COWARD, Noel (dramatist & actor); Teddington, Eng., Dec. 16, 1899.
- COWELL, Henry (composer); Menlo Park, Calif., Mar. 11, 1897.
- COWLES, Gardner (publisher); Algona, Iowa, Jan. 31, 1903.
- COWLEY, Malcolm (critic & editor); Bel-sano, Pa., Aug. 24, 1898.
- COX, James M. (publisher); Jacksonburg, Ohio, Mar. 31, 1870.
- COX, Wally (Wallace Maynard Cox) (comedian); Detroit, Mich., Dec. 6, 1924.
- COZZENS, James Gould (novelist); Chicago, Ill., Aug. 19, 1903.
- CRAIN, Jeanne (actress); Barstow, Calif., May 25, 1925.
- CRAWFORD, Broderick (actor); Philadelphia, Pa., Dec. 9, 1911.
- CRAWFORD, Joan (Lucille LeSueur) (actress); San Antonio, Tex., Mar. 23, 1908.
- CRESTON, Paul (composer); New York City, Oct. 10, 1906.
- CRISLER, Fritz (Herbert O.) (sports executive); Earlville, Ill., Jan. 12, 1899.
- CRISP, Donald (actor); London, Eng.
- CRONIN, Archibald J. (novelist); Cardross, Scot., July 19, 1896.
- CRONIN, Joe (baseball manager); San Francisco, Calif., Oct. 12, 1906.
- CRONYN, Hume (actor); London, Ont., Can.
- CROOKS, Richard (tenor); Trenton, N. J., June 26, 1900.
- CROSBY, Bing (Harry) (actor & singer); Tacoma, Wash., May 2, 1904.
- CROSBY, Bob (band leader & actor); Spokane, Wash., Aug. 23, 1913.
- CROSS, Milton (radio announcer); New York City, Apr. 16, 1897.
- CROTHERS, Rachel (dramatist); Bloomington, Ill., Dec. 12, 1878.
- CROUSE, Russel (dramatist); Findlay, Ohio, Feb. 20, 1893.
- CUGAT, Xavier (orchestra leader); Barcelona, Sp., Jan. 1, 1900.
- CUKOR, George (movie director); New York City, July 7, 1899.
- CUMMINGS, Edward Estlin (poet); Cambridge, Mass., Oct. 14, 1894.
- CUMMINGS, Robert (actor); Joplin, Mo., June 9, 1910.
- CURTIS, Tony (actor); New York City, June 3, 1925.
- CURTIZ, Michael (movie director); Budapest, Hung., Dec. 24, 1888.
- CURZON, Clifford (pianist); London, Eng., May 18, 1907.
- DAHL, Arlene (actress); Minneapolis, Minn., Aug. 11.
- DAILEY, Dan (actor); New York City.
- DALI, Salvador (painter); Figueras, Sp., May 11, 1904.
- DAMONE, Vic (singer); Brooklyn, N. Y., June 12, 1928.
- DANIELL, Henry (actor); London, Eng., Mar. 5, 1894.
- DANIELS, Billy (singer); Jacksonville, Fla., Sept. 14, 1912.
- DANILOVA, Alexandra (dancer); Peterhof, Rus.
- DARCEL, Denise (actress); Paris, Fr., 1926.
- DARNELL, Linda (actress); Dallas, Tex.
- DARRIEUX, Danielle (actress); Bordeaux, Fr., May 1, 1917.
- DAVIES, Marion (actress); New York City, Jan. 1, 1900.
- DAVIS, Bette (actress); Lowell, Mass., Apr. 5, 1908.

- DAVIS, Elmer (radio commentator); Aurora, Ind., Jan. 13, 1890.
- DAVIS, Gladys Rockmore (painter); New York City, May 11, 1901.
- DAVIS, Joan (actress); St. Paul, Minn.
- DAVIS, John W. (lawyer); Clarksburg, W. Va., Apr. 13, 1873.
- DAVIS, Stuart (painter); Philadelphia, Pa., Dec. 7, 1894.
- DAY, Dennis (singer); New York City, May 21, 1917.
- DAY, Doris (Doris von Kappelhoff) (singer); Cincinnati, Ohio, Apr. 3, 1924.
- DAY, Laraine (Lorraine Johnson) (actress); Roosevelt, Utah, Oct. 13, 1920.
- DEAN, Dizzy (Jay Hanna Dean) (baseball player); Lucas, Ark., Jan. 16, 1911.
- DEFAUW, Désiré (orchestra conductor); Ghent, Belg., Sept. 5, 1885.
- DE GAULLE, Charles (French statesman); Lille, Fr., Nov. 22, 1890.
- DE HAVEN, Gloria (actress); Los Angeles, Calif., July 23.
- DE HAVILAND, Olivia (actress); Tokyo, Jap., July 1, 1916.
- DE KOONING, William (painter); Rotterdam, Neth., 1904.
- DE LA MARE, Walter (poet); Charlton, Eng., Apr. 25, 1873.
- DELLO JOIO, Norman (composer); New York City, Jan. 24, 1913.
- DEMARET, Jim (golfer); Houston, Tex., May 10, 1910.
- DEMILLE, Agnes (choreographer); New York City.
- DEMILLE, Cecil B. (movie director); Ashfield, Mass., Aug. 12, 1881.
- DEMPSEY, Jack (William H.) (boxer); Manassa, Colo., June 24, 1894.
- DERAIN, André (painter); Chatou, Fr., June 10, 1880.
- DEREK, John (actor); Hollywood, Calif., Aug. 12, 1926.
- DE SICA, Vittorio (actor & movie director); Sora, It., July 7, 1901.
- DEUTSCH, Babette (poet & novelist); New York City, Sept. 22, 1895.
- DE VALERA, Éamon (Irish statesman); New York City, Oct. 14, 1882.
- DEVINE, Andy (actor); Flagstaff, Ariz., Oct. 7, 1905.
- DE VOTO, Bernard (novelist & critic); Ogden, Utah, Jan. 11, 1897.
- DEWEY, Thomas E. (U. S. statesman); Owosso, Mich., Mar. 24, 1902.
- DE WILDE, Brandon (actor); New York City, Apr. 9, 1942.
- DIAMOND, David (composer); Rochester, N. Y., July 9, 1915.
- DIETRICH, Marlene (Maria Magdalena von Losch) (actress); Berlin, Ger., Dec. 27, 1904.
- DILLARD, Harrison (hurdler); Cleveland, Ohio, July 8, 1923.
- DiMAGGIO, Dom (baseball player); San Francisco, Calif., Feb. 12, 1918.
- DiMAGGIO, Joe (baseball player); Martinez, Calif., Nov. 25, 1914.
- DISNEY, Walt (animated cartoonist); Chicago, Ill., Dec. 5, 1901.
- DOHNÁNYI, Ernst von (composer); Pressburg, Slovakia, July 27, 1877.
- DOLIN, Anton (Patrick Healey-Kay) (dancer & choreographer); Slinfold, Sussex, Eng., July 27, 1904.
- DONAT, Robert (actor); Withington, Eng., Mar. 18, 1905.
- DONLEVY, Brian (actor); Portadown, Ire., Feb. 9, 1903.
- DORATI, Antal (orchestra conductor); Budapest, Hung., Apr. 9, 1906.
- DORSEY, Tommy (band leader); Mahanoy Plane, Pa., Nov. 19, 1905.
- DOS PASSOS, John (novelist); Chicago, Ill., Jan. 14, 1896.
- DOUGLAS, Kirk (Issur Danielovitch) (actor); Amsterdam, N. Y., Dec. 9, 1916.
- DOUGLAS, Melvyn (Melvyn Hesselberg) (actor); Macon, Ga., Apr. 5, 1901.
- DOUGLAS, Paul (actor); Philadelphia, Pa., Apr. 11, 1907.
- DOUGLAS, William O. (U. S. jurist); Maine, Minn., Oct. 16, 1898.
- DOWLING, Eddie (actor & director); Woonsocket, R. I., Dec. 9, 1894.
- DOWNEY, Morton (singer); Wallingford, Conn., Nov. 14, 1902.
- DRAKE, Alfred (singer & actor); New York City, Oct. 7, 1914.
- DRAPER, Paul (dancer); Florence, It., Oct. 25, 1911.
- DRAPER, Ruth (actress); New York City, Dec. 2, 1884.
- DRESSEN, Chuck (Charles) (baseball manager); Decatur, Ill., Sept. 20, 1898.
- DRU, Joanne (Joanne Letitia La Cock) (actress); Logan, W. Va., Jan. 31.
- DUCLOS, Jacques (French Communist leader); Louey, Fr., Oct. 2, 1896.
- DUFFY, Edmund (cartoonist); Jersey City, N. J., Mar. 1, 1899.
- du MAURIER, Daphne (novelist); London, Eng., May 13, 1907.
- DUNCAN, Todd (singer); Danville, Ky., Feb. 12, 1903.
- DUNHAM, Katherine (dancer); Chicago, Ill.
- DUNNE, Irene (actress); Louisville, Ky., Dec. 20, 1904.

- DUNNOCK, Mildred (actress); Baltimore, Md.
- DURANTE, Jimmy (comedian); New York City, Feb. 10, 1893.
- DURBIN, Deanna (Edna) (actress); Winnipeg, Can., Dec. 4, 1922.
- DUROCHER, Leo (baseball manager); West Springfield, Mass., July 27, 1906.
- DYKES, Jimmie (baseball manager); Philadelphia, Pa., Nov. 10, 1896.
- EASTMAN, Max (social writer); Canandaigua, N. Y., Jan. 4, 1883.
- ECKSTINE, Billy (singer); Pittsburgh, Pa., July 8, 1914.
- EDDY, Nelson (baritone); Providence, R. I., June 29, 1901.
- EDEN, Anthony (British statesman); England, June 12, 1897.
- EDMONDS, Walter (novelist); Boonville, N. Y., July 15, 1903.
- EGLEVSKY, André (dancer); Moscow, Rus., Dec. 21, 1917.
- EINAUDI, Luigi (Italian statesman); Carru, Piedmont, It., Mar. 24, 1874.
- EINSTEIN, Albert (physicist); Ulm, Ger., Mar. 14, 1879.
- EISENHOWER, Dwight D. (U. S. statesman); Denison, Tex., Oct. 14, 1890.
- ELDRIDGE, Florence (Florence McKech-nie) (actress); Brooklyn, N. Y., Sept. 5, 1901.
- ELIOT, Thomas Stearns (poet); St. Louis, Mo., Sept. 26, 1888.
- ELIZABETH II (Queen of England); London, Eng., Apr. 21, 1926.
- ELLINGTON, Duke (Edward) (band leader); Washington, D. C., Apr. 29, 1899.
- ELLIOTT, Bill (actor); Pattonsburg, Mo.
- ELMAN, Mischa (violinist); Stalnoye, Rus., Jan. 20, 1891.
- EMERSON, Faye (actress); Elizabeth, La., July 8, 1917.
- ENESCO, Georges (composer); Dorohoi, Rum., Aug. 19, 1881.
- EPSTEIN, Sir Jacob (sculptor); New York City, Nov. 10, 1880.
- EVANS, Maurice (actor); Dorchester, Eng., June 3, 1901.
- EVELYN, Judith (actress); Seneca, S. Dak., Mar. 20, 1913.
- EWELL, Tom (Yewell Tompkins) (actor); Owensboro, Ky., Apr. 29, 1909.
- FADIMAN, Clifton (literary critic); New York City, May 15, 1904.
- FAIRBANKS, Douglas, Jr., (actor); New York City, Dec. 9, 1909.
- FAIRLESS, Benjamin F. (industrialist); Pigeon Run, Ohio, May 3, 1890.
- FALKENBURG, Jinx (Eugenia) (actress); Barcelona, Sp., Jan. 21, 1919.
- FAROUK I (former King of Egypt); Cairo, Egy., Feb. 11, 1920.
- FARRAR, Geraldine (soprano); Melrose, Mass., Feb. 28, 1882.
- FARRELL, Eileen (soprano); Willimantic, Conn., 1920.
- FARRELL, James T. (novelist); Chicago, Ill., Feb. 27, 1904.
- FAST, Howard (novelist); New York City, Nov. 11, 1914.
- FAULKNER, William (novelist); New Albany, Miss., Sept. 25, 1897.
- FAY, Frank (actor); San Francisco, Calif., Nov. 17, 1897.
- FAYE, Alice (Alice Leppert) (actress); New York City, May 5, 1915.
- FEININGER, Lyonel (painter); New York City, July 17, 1871.
- FELLER, Bobby (baseball player); Van Meter, Iowa, Nov. 3, 1918.
- FERBER, Edna (novelist); Kalamazoo, Mich., Aug. 15, 1887.
- FERMI, Enrico (physicist); Rome, It., Sept. 29, 1901.
- FERNANDEL (Fernand Constantin) (actor); Marseille, France, May 8, 1903.
- FERRER, Jose (actor); Puerto Rico, 1909.
- FERRER, Mel (actor); Elberon, N. J., Aug. 25, 1917.
- FERRIS, Dan (athletic executive); Pawling, N. Y., July 7, 1899.
- FEUCHTWANGER, Lion (novelist); Munich, Ger., July 7, 1884.
- FIEDLER, Arthur (orchestra conductor); Boston, Mass., Dec. 17, 1894.
- FIELD, Betty (actress); Boston, Mass., Feb. 8, 1918.
- FIELD, Marshall, III (publisher); Chicago, Ill., Sept. 28, 1893.
- FIELDS, Gracie (actress); Rochdale, Eng., Jan. 9, 1898.
- FISCHER, Edwin (pianist); Basel, Switz., Oct. 6, 1886.
- FISHER, Dorothy Canfield (novelist); Lawrence, Kans., Feb. 17, 1879.
- FISHER, Eddie (singer); Philadelphia, Pa.
- FISHER, Ham (Hammond) (cartoonist); Wilkes-Barre, Pa.
- FISHER, Vardis (novelist); Annis, Idaho, Mar. 31, 1895.
- FITZGERALD, Barry (William J. Shields) (actor); Dublin, Ire., Mar. 1888.
- FITZGERALD, Ella (singer); Newport News, Va., Apr. 25, 1918.
- FITZGERALD, Geraldine (actress); Dublin, Ire., Nov. 24, 1914.



- FITZSIMMONS, Sunny Jim (horse trainer); Sheepshead Bay, N. Y., July 23, 1874.
- FLAGSTAD, Kirsten (soprano); Hamar, Nor., July 12, 1895.
- FLAM, Herbert (tennis player); Brooklyn, N. Y., Oct. 17, 1928.
- FLEMING, Sir Alexander (bacteriologist); Lochfield, Eng., 1881.
- FLEMING, Rhonda (Marilyn Louis) (actress); Los Angeles, Calif., Aug. 10, 1923.
- FLYNN, Errol (actor); Hobart, Tasmania, June 20, 1909.
- FOCH, Nina (actress); Leyden, Neth., Apr. 20, 1924.
- FONDA, Henry (actor); Grand Island, Nebr., May 16, 1905.
- FONTAINE, Joan (actress); Tokyo, Jap., Oct. 22, 1917.
- FONTANNE, Lynn (actress); London, Eng., 1887.
- FONTTEYN, Margot (Margaret Hookham) (dancer); Reigate, Eng., May 18, 1919.
- FORD, Glenn (Gwyllyn Ford) (actor); Quebec, Can., May 1, 192?.
- FORD, Henry, II (industrialist); Detroit, Mich., Sept. 4, 1917.
- FORD, John (movie director); Cape Elizabeth, Maine, Feb. 1, 1895.
- FORESTER, Cecil Scott (novelist); Cairo, Egypt, Aug. 27, 1899.
- FORSTER, Edward M. (novelist); England, 1879.
- FORSYTHE, John (actor); Penns Grove, N. J., Jan. 29, 1918.
- FOSS, Lukas (composer); Berlin, Ger., Aug. 15, 1922.
- FOWLER, Gene (biographer); Denver, Colo., 1890.
- FRANÇAIX, Jean (composer); Le Mans, Fr., May 23, 1912.
- FRANCESCATTI, Zino (violinist); Marseille, Fr., Aug. 9, 1905.
- FRANCIS, Kay (Katherine Gibbs) (actress); Oklahoma City, Okla., Jan. 13, 1905.
- FRANCO, Francisco (Spanish statesman); El Ferrol, Sp., Dec. 4, 1892.
- FRANKEN, Rose (dramatist & novelist); Gainesville, Tex., 1898.
- FRANKFURTER, Felix (U. S. jurist); Vienna, Aus., Nov. 15, 1882.
- FRASER, Laura Gardin (sculptor); Chicago, Ill., Sept. 14, 1889.
- FRAWLEY, William (actor); Burlington, Iowa, Feb. 26, 1893.
- FREDERICK IX (King of Denmark); nr. Copenhagen, Den., Mar. 11, 1899.
- FRICK, Ford C. (baseball executive); Wawaka, Ind., Dec. 19, 1894.
- FRIML, Rudolf (composer); Prague, Czech., Dec. 7, 1884.
- FRISCH, Frank F. (baseball player); New York City, Sept. 9, 1898.
- FROMAN, Jane (singer); St. Louis, Mo., Nov. 10, 1911.
- FROST, Robert (poet); San Francisco, Calif., Mar. 26, 1875.
- FRY, Christopher (dramatist); Bristol, Eng., Dec. 18, 1907.
- FUCHS, Jim (shotputter); Chicago, Ill., Dec. 6, 1927.
- FURTWÄNGLER, Wilhelm (orchestra conductor); Berlin, Ger., Jan. 25, 1886.
- GABIN, Jean (actor); Paris, Fr., May 17, 1904.
- GABLE, Clark (actor); Cadiz, Ohio, Feb. 1, 1901.
- GABOR, Eva (actress); Budapest, Hung.
- GABOR, Zsa Zsa (Sari) (actress); Budapest, Hung.
- GALLICO, Paul (author); New York City, July 26, 1897.
- GALLI-CURCI, Amelita (soprano); Milan, It., Nov. 18, 1889.
- GALLUP, George H. (public opinion statistician); Jefferson, Iowa, Nov. 18, 1901.
- GANNETT, Frank E. (publisher); Bristol, N. Y., Sept. 15, 1876.
- GANNETT, Lewis (literary critic); Rochester, N. Y., Oct. 3, 1891.
- GARBO, Greta (Greta Gustafsson) (actress); Stockholm, Swed., Sept. 18, 1905.
- GARDEN, Mary (soprano); Aberdeen, Scot., Feb. 20, 1877.
- GARDINER, Reginald (actor); Wimbledon, Eng., Feb. 27, 1903.
- GARDNER, Ava (actress); Smithfield, N. C.
- GARDNER, Ed (Edward Poggenberg) (actor); Astoria, N. Y., June 29, 1905.
- GARDNER, Erie Stanley (novelist); Malden, Mass., July 17, 1889.
- GARGAN, William (actor); Brooklyn, N. Y., July 17, 1905.
- GARLAND, Judy (Frances Gumm) (actress); Grand Rapids, Minn., June 10, 1922.
- GARROWAY, Dave (comedian); Schenectady, N. Y., July 13, 1913.
- GARSON, Greer (actress); County Down, Ire.
- GASSMAN, Vittorio (actor); Genoa, Italy, Sept. 1, 1922.
- GAVILAN, Kid (Gerardo González) (boxer); Camagüey, Cuba, Jan. 6, 1926.
- GAXTON, William (Arturo Caxiola) (actor); San Francisco, Calif., Dec. 2, 1893.
- GAYNOR, Mitzl (actress); Chicago, Ill., Sept. 4.

- GEDDES, Barbara Bel (actress); New York City, Oct. 31, 1922.
- GEDDES, Norman Bel (stage designer); Adrian, Mich., Apr. 27, 1893.
- GENN, Leo (actor); London, Eng., 1905.
- GEORGE, Gladys (Gladys Clare) (actress); Patton, Maine, Sept. 13, 1904.
- GEORGE, Grace (actress); New York City, Dec. 25, 1880.
- GERSHWIN, Ira (lyricist); New York City, Dec. 6, 1896.
- GIELGUD, Sir John (actor); London, Eng., Apr. 14, 1904.
- GIESEKING, Walter (pianist); Lyon, Fr., Nov. 5, 1895.
- GIGLI, Beniamino (tenor); Rencanati, It., Mar. 20, 1890.
- GILES, Warren (baseball executive); Tiskilwa, Ill., May 28, 1896.
- GIMBEL, Bernard F. (merchant); Vincennes, Ind., Apr. 10, 1885.
- GISH, Dorothy (actress); Massillon, Ohio, Mar. 11, 1898.
- GISH, Lillian (actress); Springfield, Ohio, Oct. 14, 1896.
- GLEASON, Jackie (actor); Brooklyn, N. Y., Feb. 26, 1916.
- GLEASON, James (actor); New York City, May 23, 1886.
- GODDARD, Paulette (actress); Great Neck, N. Y., June 3, 1911.
- GODFREY, Arthur (entertainer); New York City, Aug. 31, 1903.
- GOLDBERG, Rube (Reuben) (cartoonist); San Francisco, Calif., July 4, 1883.
- GOLDEN, John (play producer); New York City, June 27, 1874.
- GOLDING, Louis (novelist); Manchester, Eng., Nov. 19, 1895.
- GOLDMAN, Edwin Franko (composer & conductor); Louisville, Ky., Jan. 1, 1878.
- GOLDWYN, Samuel (Samuel Goldfish) (movie producer); Warsaw, Pol., 1882.
- GOLSCHMANN, Vladimir (orchestra conductor); Paris, Fr., Dec. 16, 1893.
- GONZALES, Pancho (Richard) (tennis player); Los Angeles, Calif., May 9, 1928.
- GOODMAN, Benny (clarinetist); Chicago, Ill., May 30, 1909.
- GOOSSENS, Eugene (orchestra conductor); London, Eng., May 26, 1893.
- GORDON, Max (play producer); New York City, 1892.
- GORDON, Ruth (actress); Wollaston, Mass., Oct. 30, 1896.
- GOSDEN, Freeman F. *See* Amos.
- GOULD, Chester (cartoonist); Pawnee, Okla., 1900.
- GOULD, Morton (composer); Richmond Hill, N. Y., Dec. 10, 1913.
- GRABLE, Betty (actress); St. Louis, Mo., Dec. 18, 1916.
- GRACE, Eugene G. (industrialist); Goshen, N. J., Aug. 27, 1876.
- GRAHAM, Martha (choreographer); Pittsburgh, Pa.
- GRAHAME, Gloria (Gloria Grahame Hollward) (actress); Los Angeles, Calif., Nov. 28, 1925.
- GRAINGER, Percy (pianist); Melbourne, Austr., July 8, 1882.
- GRANGE, Red (Harold) (football player); Forksville, Pa., June 13, 1904.
- GRANGER, Farley (actor); San Jose, Calif., July 1, 1925.
- GRANGER, Stewart (James Stewart) (actor); May 6, 1913.
- GRANT, Cary (Archibald A. Leach) (actor); Bristol, Eng., Jan. 18, 1904.
- GRAVES, Robert (poet & novelist); London, Eng., July 26, 1895.
- GRAY, Harold (cartoonist); Kankakee, Ill., Jan. 20, 1894.
- GRAYSON, Kathryn (Zelma Hedrick) (actress); Winston-Salem, N. C.
- GRECO, José (dancer); Montorio nei Fren-tani, It., Dec. 23, 1918.
- GREEN, Julian (novelist); Paris, Fr., Sept. 6, 1900.
- GREEN, Paul (dramatist); Lillington, N. C., Mar. 17, 1894.
- GREENBERG, Hank (baseball player); New York City, Jan. 1, 1911.
- GREENE, Graham (novelist); Berkhamstead, Eng., Oct. 2, 1904.
- GREENE, Richard (actor); Plymouth, Eng., Aug. 25, 1918.
- GREGORY, Horace (poet); Milwaukee, Wis., Apr. 10, 1898.
- GRIFFITH, Clark C. (baseball executive); Clear Creek, Mo., Nov. 20, 1869.
- GROFÉ, Ferde (composer); New York City, Mar. 27, 1892.
- GROMYKO, Andrei A. (Soviet statesman); Starye Gromyki, Rus., July 5, 1909.
- GROPIUS, Walter (architect); Berlin, Ger., May 18, 1883.
- GROPPER, William (painter); New York City, Dec. 3, 1897.
- GROSZ, George (painter); Berlin, Ger., July 26, 1893.
- GROVE, Lefty (Robert M.) (baseball player); Lonaconing, Md., Mar. 6, 1900.
- GUEST, Edgar (poet); Birmingham, Eng., Aug. 20, 1881.
- GUINNESS, Alec (actor); Marylebone, London, Eng., Apr. 2, 1914.
- GUITRY, Sacha (Alexandre) (movie director); St. Petersburg, Rus., Feb. 21, 1885.

- GUNTHER, John (journalist & author); Chicago, Ill., Aug. 30, 1901.
- GUSTAVUS VI (King of Sweden); Stockholm, Swed., Nov. 11, 1882.
- GUTHRIE, Alfred B., Jr. (novelist); Bedford, Ind., Jan. 13, 1901.
- GWENN, Edmund (actor); London, Eng., Sept. 26, 1877.
- HAAKON VII (King of Norway); Denmark, Aug. 3, 1872.
- HACKETT, Francis (critic & novelist); Kilkenny, Ire., Jan. 21, 1883.
- HAGEN, Uta (actress); Gottingen, Ger., June 12, 1919.
- HAGEN, Walter (golfer); Rochester, N. Y., Dec. 21, 1892.
- HAILE SELASSIE I (Emperor of Ethiopia); Ethiopia, July 17, 1891.
- HALAS, George (football coach); Chicago, Ill., Feb. 2, 1895.
- HALEY, Jack (actor); Boston, Mass., Aug. 10, 1902.
- HAMMARSKJÖLD, Dag (Sec. Gen. of U. N.); Jonkoping, Swed., July 29, 1905.
- HAMMERSTEIN, Oscar, II (librettist); New York City, July 12, 1895.
- HAMMETT, Dashiell (novelist); St. Marys Co., Md., May 27, 1894.
- HAMPDEN, Walter (Walter Hampden Dougherty) (actor); Brooklyn, N. Y., June 30, 1879.
- HANDY, William C. (blues composer); Florence, Ala., Nov. 16, 1873.
- HANSON, Howard (composer); Wahoo, Nebr., Oct. 28, 1896.
- HARDWICKE, Sir Cedric (actor); Lye, Eng., Feb. 19, 1893.
- HARRIDGE, Will (baseball executive); Chicago, Ill., Oct. 16, 1886.
- HARRIMAN, W. Averell (U. S. statesman); Nov. 15, 1891.
- HARRIS, Bucky (Stanley R.) (baseball manager); Port Jervis, N. Y., Nov. 8, 1896.
- HARRIS, Jed (stage producer); Vienna, Aus., Feb. 25, 1900.
- HARRIS, Julie (actress); Grosse Pointe, Mich., Dec. 2, 1925.
- HARRIS, Phil (band leader); Linton, Ind., June 24, 1906.
- HARRIS, Roy (composer); Lincoln Co., Okla., Feb. 12, 1898.
- HARRISON, Rex (actor); Huyton, Eng., Mar. 5, 1908.
- HART, Moss (dramatist); New York City, Oct. 24, 1904.
- HAVOC, Jane (June Hovick) (actress); Seattle, Wash.
- HAYES, Alfred (novelist); London, 1911.
- HAYES, Helen (Helen Brown) (actress); Washington, D. C., Oct. 10, 1900.
- HAYES, Roland (tenor); Curryville, Ga., June 3, 1887.
- HAYMES, Dick (singer); Argentina.
- HAYWARD, Louis (actor); Johannesburg, So. Af., Mar. 19, 1909.
- HAYWARD, Susan (Edythe Marrener) (actress); Brooklyn, N. Y., June 30, 1919.
- HAYWORTH, Rita (Margarita Cansino) (actress); New York City, Oct. 17, 1918.
- HEARST, David W. (publisher); New York City, Dec. 2, 1915.
- HEARST, Randolph A. (publisher); New York City, Dec. 2, 1915.
- HEARST, William Randolph, Jr. (publisher); New York City, Jan. 27, 1908.
- HEATTER, Gabriel (radio commentator); New York City, 1890.
- HECHT, Ben (novelist & dramatist); New York City, Feb. 28, 1894.
- HEFLIN, Van (actor); Walters, Okla., Dec. 13, 1910.
- HEIFETZ, Jascha (violinist); Vilna, Rus., Feb. 2, 1901.
- HELLMAN, Lillian (dramatist); New Orleans, La., June 20, 1905.
- HEMINGWAY, Ernest (novelist); Oak Park, Ill., July 21, 1898.
- HENDERSON, Skitch (pianist); Birmingham, Eng., Jan. 27, 1918.
- HENIE, Sonja (skater); Oslo, Nor., Apr. 8, 1913.
- HENREID, Paul (actor); Trieste, It., Jan. 10, 1908.
- HEPBURN, Audrey (actress); Brussels, Belg., May 4, 1929.
- HEPBURN, Katharine (actress); Hartford, Conn., 1909.
- HERBLOCK (Herbert L. Block) (cartoonist); Chicago, Ill., Oct. 13, 1909.
- HERMAN, Woody (band leader); Milwaukee, Wis., May 16, 1913.
- HERSEY, John R. (novelist); Tientsin, China, June 17, 1914.
- HERSHEY, Lewis B. (U. S. major general); Steuben Co., Ind., Sept. 12, 1893.
- HERSHOLT, Jean (actor); Copenhagen, Den., July 12, 1886.
- HESS, Dame Myra (pianist); London, Eng., Feb. 25, 1890.
- HESTON, Charlton (actor); Evanston, Ill., Oct. 4, 1924.
- HILDEGARDE (Hildegard Loretta Sell) (entertainer); Adell, Wis., Feb. 1, 1906.
- HILLER, Wendy (actress); Branhall, Eng., Aug. 15, 1912.
- HILLIARD, Harriet (Peggy Lou Snyder) (actress & singer); Des Moines, Iowa.



- HILLYER, Robert S. (poet); East Orange, N. J., June 3, 1895.
- HILTON, James (novelist); Leigh, Eng., Sept. 9, 1900.
- HINDEMITH, Paul (composer); Hanau, Ger., Nov. 16, 1895.
- HIROHITO (Emperor of Japan); Japan, Apr. 29, 1901.
- HITCHCOCK, Alfred J. (movie director); England, Aug. 13, 1899.
- HO CHI MINH (Indo-Chinese rebel leader); Annam, Indo-China, c.1891.
- HOBSON, Laura Z. (Laura K. Zametkin) (novelist); New York City.
- HOBSON, Valerie (actress); Larne, N. Ire., 1918.
- HODIAK, John (actor); Pittsburgh, Pa., Apr. 16.
- HOFFMAN, Paul G. (industrialist & administrator); Chicago, Ill., Apr. 26, 1891.
- HOFFMANN, Josef (pianist); Cracow, Pol., Jan. 20, 1876.
- HOGAN, Ben (golfer); Dublin, Tex., Aug. 13, 1912.
- HOLDEN, William (William Franklin Beedle, Jr.) (actor); O'Fallon, Ill., Apr. 17, 1918.
- HOLLIDAY, Judy (actress); New York City, June 21, 1923.
- HOLM, Celeste (actress & singer); New York City, Apr. 29, 1919.
- HOLT, Tim (actor); Beverly Hills, Calif., Feb. 5, 1918.
- HOMOLKA, Oscar (actor); Vienna, Aus., 1901.
- HONEGGER, Arthur (composer); Le Havre, Fr., Mar. 10, 1892.
- HOOK, Sidney (philosopher); New York City, Dec. 20, 1902.
- HOOVER, Herbert C. (U. S. statesman); West Branch, Iowa, Aug. 10, 1874.
- HOPE, Bob (comedian); London, Eng., May 29, 1903.
- HOPKINS, Mirlam (actress); Bainbridge, Ga., Oct. 18, 1902.
- HOPPE, Willie (billiards player); Cornwall, N. Y., Oct. 11, 1887.
- HOPPER, Edward (painter); Nyack, N. Y., July 22, 1882.
- HORNE, Lena (singer); Brooklyn, N. Y., 1918.
- HORNSBY, Rogers (baseball manager); Winters, Tex., Apr. 27, 1896.
- HOROWITZ, Vladimir (pianist); Kiev, Rus., Oct. 1, 1904.
- HOUSMAN, Laurence (dramatist & novelist); Bromsgrove, Eng., July 18, 1865.
- HOWARD, Roy W. (publisher); Gano, Ohio, Jan. 1, 1883.
- HUBBELL, Carl (baseball player); Carthage, Mo., June 22, 1903.
- HUGHES, Langston (poet); Joplin, Mo., Feb. 1, 1902.
- HULL, Henry (actor); Louisville, Ky., Oct. 3, 1890.
- HULL, Josephine (actress); Newtonville, Mass., Jan. 3, 1886.
- HUNT, Marsha (actress); Chicago, Ill., Oct. 17, 1917.
- HUNTER, Kim (Janet Cole) (actress); Detroit, Mich., Nov. 12, 1922.
- HUSSEY, Ruth (actress); Providence, R. I.
- HUSTON, John (movie director); Nevada, Mo., Aug. 5, 1906.
- HUTCHINS, Robert M. (educator); Brooklyn, N. Y., Jan. 17, 1899.
- HUTTON, Betty (Betty Thornberg) (singer); Battle Creek, Mich., Feb. 26, 1921.
- HUXLEY, Aldous (novelist); Godalming, Eng., July 26, 1894.
- HUXLEY, Julian S. (biologist); England, June 22, 1837.
- IBERT, Jacques (composer); Paris, Fr., Aug. 15, 1890.
- INGE, William (dramatist); Independence, Kans., May 3, 1913.
- IRELAND, John (actor); Vancouver, B. C., Can., Jan. 30, 1915.
- ISHERWOOD, Christopher (novelist); Disley, Cheshire, Eng., Aug. 26, 1904.
- ISTOMEN, Eugene (pianist); New York City, Nov. 26, 1925.
- ITURBI, José (pianist); Valencia, Sp., Nov. 28, 1895.
- IVES, Burl (folksinger); Hunt, Ill., June 14, 1909.
- JACKSON, Charles (novelist); Summit, N. J., Apr. 6, 1903.
- JACKSON, Robert H. (U. S. jurist); Spring Creek, Pa., Feb. 13, 1892.
- JAFFE, Sam (actor); New York City, Mar. 8, 1898.
- JAGEL, Frederick (tenor); Brooklyn, N. Y., June 10, 1897.
- JAGGER, Dean (actor); Lima, Ohio, Nov. 7, 1903.
- JAMES, Harry (trumpeter); Albany, Ga., Mar. 15, 1916.
- JAMESON, Margaret Storm (novelist); Whitby, Eng., 1897.
- JANIS, Elsie (Elsie Bierbower) (actress); Columbus, Ohio, Mar. 16, 1889.
- JANSSEN, Herbert (baritone); Cologne, Ger.
- JEANMAIRE, Renée (dancer & actress); Paris, Fr., Apr. 29, 1924.
- JEBB, Sir Gladwyn (British statesman); England, Apr. 25, 1900.

- JEFFERS, Robinson (poet); Pittsburgh, Pa., Jan. 10, 1887.
- JEPSON, Helen (soprano); Titusville, Pa., Nov. 25, 1907.
- JERITZA, Maria (soprano); Brünn, Aus., Oct. 6, 1887.
- JESSEL, George (comedian); New York City, Apr. 3, 1898.
- JESSUP, Philip C. (U. S. statesman); New York City, Jan. 5, 1897.
- JOHN, Augustus (painter); Tenby, Wales, Jan. 4, 1879.
- JOHNS, Glynis (actress); Durban, So. Af., Oct. 5, 1923.
- JOHNSON, Celia (actress); Richmond, Eng., Dec. 18, 1908.
- JOHNSON, Chick (Harold) (comedian); Chicago, Ill., Mar. 5, 1895.
- JOHNSON, Hall (choral director); Athens, Ga., Mar. 12, 1888.
- JOHNSON, Josephine Winslow (novelist); Kirkwood, Mo., June 20, 1910.
- JOHNSON, Van (actor); Newport, R. I., Aug. 20, 1916.
- JOLIOT-CURIE, Frédéric (physicist); Paris, Fr., Mar. 19, 1900.
- JOLIOT-CURIE, Irène (physicist); France, Sept. 12, 1897.
- JONES, Bobby (golfer); Atlanta, Ga., Mar. 17, 1902.
- JONES, James (novelist); Robinson, Ill., Nov. 6, 1921.
- JONES, Jennifer (Phyllis Isley) (actress); Tulsa, Okla., Mar. 2, 1919.
- JONES, Robert Edmond (stage designer); Milton, N. H., Dec. 12, 1887.
- JORDAN, James. *See* McGee.
- JORDAN, Marian. *See* McGee.
- JORY, Victor (actor); Dawson, Can., Nov. 23, 1902.
- JOSEPHSON, Matthew (critic & biographer); Brooklyn, N. Y., Feb. 15, 1899.
- JOSLYN, Allyn (actor); Milford, Pa., July 21, 1905.
- JOURDAN, Louis (actor); Marseille, Fr., June 18, 1921.
- JULIANA (Queen of Netherlands); The Hague, Neth., Apr. 30, 1909.
- JUNG, Carl G. (psychiatrist); Basel, Switz., July, 26, 1875.
- KABALEVSKY, Dmitri (composer); Petrograd, Rus., Dec. 30, 1904.
- KAISER, Henry J. (industrialist); Sprout Brook, N. Y., May 9, 1882.
- KALTENBORN, Hans V. (radio commentator); Milwaukee, Wis., July, 9, 1878.
- KANIN, Garson (dramatist & director); Rochester, N. Y., Nov. 24, 1912.
- KANTOR, MacKinlay (novelist); Webster City, Iowa, Feb. 4, 1904.
- KANTOR, Morris (painter); Russia, Apr. 15, 1896.
- KARLOFF, Boris (Charles E. Pratt) (actor); Dulwich, Eng., Nov. 23, 1887.
- KAUFFMANN, Samuel H. (publisher); Washington, D. C., Feb. 24, 1898.
- KAUFMAN, George S. (dramatist); Pittsburgh, Pa., Nov. 16, 1889.
- KAYE, Danny (David Daniel Kominski) (comedian); Brooklyn, N. Y., Jan. 18, 1913.
- KAYE, Nora (Nora Koreff) (ballerina); New York City, 1920.
- KAYE, Sammy (band leader); Cleveland, Ohio, Mar. 13, 1910.
- KAZAN, Ella (movie & stage director); Istanbul, Turk., Sept. 7, 1909.
- KAZIN, Alfred (literary critic); Brooklyn, N. Y., June 5, 1915.
- KEATON, Buster (comedian); Piqua, Kans., Oct. 4, 1896.
- KEEL, Howard (singer & actor); Gillespie, Ill.
- KELLAND, Clarence Budington (novelist); Portland, Mich., July 11, 1881.
- KELLY, Emmett (clown); Sedan, Kans., 1898.
- KELLY, Gene (actor); Pittsburgh, Pa., Aug. 23, 1912.
- KELLY, Paul (actor); Brooklyn, N. Y., Aug. 8, 1899.
- KELLY, Walt (cartoonist); Philadelphia, Pa., 1914.
- KENNEDY, Arthur (actor); Worcester, Mass., Feb. 17, 1914.
- KENNEDY, Margaret (novelist); London, Eng., 1896.
- KENT, Rockwell (painter); Tarrytown Heights, N. Y., June 21, 1882.
- KERR, Deborah (actress); Helensburgh, Scot., Sept. 30, 1921.
- KETTERING, Charles F. (engineer); nr. Loudonville, Ohio, Aug. 29, 1876.
- KEYES, Evelyn (actress); Port Arthur, Tex.
- KEYES, Frances Parkinson (novelist); Univ. of Va., July 21, 1885.
- KHACHATURIAN, Aram (composer); Tiflis, Rus., June 6, 1903.
- KIEPURA, Jan (tenor); Sosnowiec, Pol., May 16, 1902.
- KIERAN, John (author); New York City, Aug. 2, 1892.
- KILGALLAN, Dorothy (columnist); Chicago, Ill., July 3, 1913.

- KILPATRICK**, John Reed (sports executive); New York City, June 15, 1889.
- KINER**, Ralph (baseball player); Santa Rita, N. Mex., Oct. 27, 1922.
- KING**, Dennis (actor); Coventry, Eng., Nov. 2, 1897.
- KING**, Henry (movie director); Christianburg, Va., Jan. 24, 1896.
- KING**, Wayne (band leader); Savannah, Ill., Feb. 18, 1901.
- KINGSLEY**, Sidney (Sidney Kirschner) (dramatist); New York City, Oct. 18, 1906.
- KINSEY**, Alfred C. (zoologist & sexologist); Hoboken, N. J., June 23, 1894.
- KIPHUTH**, Robert J. H. (swimming coach); Tonowanda, N. Y., Nov. 17, 1890.
- KIPNIS**, Alexander (basso); Ukraine, Feb. 1, 1896.
- KIRK**, Lisa (singer); Charleroi, Pa.
- KIRKPATRICK**, Ralph (harpsichordist); Leominster, Mass., June 10, 1911.
- KIRSTEN**, Dorothy (soprano); Montclair, N. J., July 6, 1919.
- KLEMPERER**, Otto (orchestra conductor); Breslau, Ger., 1885.
- KNIGHT**, John S. (publisher); Bluefield, W. Va., Oct. 26, 1894.
- KNOX**, Alexander (actor); Strathroy, Can., Jan. 16, 1907.
- KODÁLY**, Zoltán (composer); Kecskemét, Hung., Dec. 16, 1882.
- KOESTLER**, Arthur (novelist); Budapest, Hung., Sept. 5, 1905.
- KOKOSCHKA**, Oskar (painter); Pöchlarn, Aus., Mar. 1, 1886.
- KORDA**, Sir Alexander (movie producer); Turkeve, Hung., Sept. 16, 1893.
- KORJUS**, Miliza (soprano); Warsaw, Pol., Aug. 18, 1909.
- KOSTELANETZ**, Andre (orchestra conductor); Petrograd, Rus., Dec. 22, 1901.
- KRAMER**, John A. (tennis player); Las Vegas, Nev., Aug. 1, 1921.
- KRAMER**, Stanley E. (movie producer); New York City, Sept. 29, 1913.
- KREISLER**, Fritz (violinist); Vienna, Aus., Feb. 2, 1875.
- KRENEK**, Ernst (composer); Vienna, Aus., Aug. 23, 1900.
- KROCK**, Arthur (journalist); Nov. 16, 1886.
- KROLL**, Leon (painter); New York City, Dec. 6, 1884.
- KRUGER**, Otto (actor); Toledo, Ohio, Sept. 6, 1885.
- KRUPA**, Gene (drummer & band leader); Chicago, Ill., Jan. 15, 1909.
- KHRUSCHEV**, Nikita S. (Soviet statesman); Kursk, Rus., Apr. 16, 1894.
- KUBELIK**, Rafael (orchestra conductor); Bychory, Czech., June 29, 1914.
- KULLMAN**, Charles (tenor); New Haven, Conn., Jan. 13, 1903.
- KURENKO**, Maria (soprano); Moscow, Rus., 1899.
- KURTZ**, Efrem (orchestra conductor); Petrograd, Rus., Nov. 7, 1900.
- KYSER**, Kay (band leader); Rocky Mount, N. C., June 18, 1905.
- LADD**, Alan (actor); Hot Springs, Ark., Sept. 3, 1913.
- LA FARGE**, Christopher (poet & novelist); New York City, Dec. 10, 1897.
- LA FARGE**, Oliver (author & anthropologist); New York City, Dec. 19, 1901.
- LAHR**, Bert (Irving Lahrheim) (comedian); New York City, Aug. 13, 1895.
- LAINE**, Frankie (singer); Chicago, Ill., Mar. 30, 1913.
- LAKE**, Veronica (Constance Keane) (actress); Lake Placid, N. Y., Nov. 14, 1919.
- LAMARR**, Hedy (actress); Vienna, Aus.
- LAMAS**, Fernando (actor); Buenos Aires, Arg., Jan. 9.
- LAMBEAU**, Curly (E. L.) (football coach); Green Bay, Wis., Apr. 9, 1898.
- LAMOUR**, Dorothy (actress); New Orleans, La., Dec. 10, 1914.
- LANCASTER**, Burt (actor); New York City, Nov. 2, 1913.
- LANCHESTER**, Elsa (Elsa Sullivan) (actress); London, Eng., Oct. 28, 1902.
- LANDOWSKA**, Wanda (harpsichordist); Warsaw, Pol., July 5, 1877.
- LANG**, Fritz (movie director); Vienna, Aus., Dec. 5, 1890.
- LANG**, Harold (dancer & actor); San Francisco, Calif.
- LANGFORD**, Frances (singer); Lakeland, Fla., Apr. 4, 1913.
- LANGFORD**, Sam (boxer); Weymouth, No. Ire., Feb. 12, 1880.
- LANGMUIR**, Irving (chemist); Brooklyn, N. Y., Jan. 31, 1881.
- LANIEL**, Joseph (French statesman); Normandy, Fr., 1890.
- LANZA**, Mario (Alfredo Arnold Cocozza) (tenor); Philadelphia, Pa., Jan. 31, 1921.
- LARSEN**, Arthur (tennis player); San Leandro, Calif., Apr. 17, 1925.
- LAUGHTON**, Charles (actor); Scarborough, Eng., July 1, 1899.
- LAWFORD**, Peter (actor); London, Eng., Sept. 7, 1923.



- LAWRENCE, Marjorie** (soprano); Deans Marsh, Austr., Feb. 17, 1909.
- LAWSON, John Howard** (dramatist); New York City, Sept. 25, 1895.
- LEAF, Munro** (children's writer); Hamilton, Md., Dec. 4, 1905.
- LEAHY, Frank** (football coach); O'Neill, Nebr., Aug. 21, 1908.
- LE CORBUSIER** (Charles-Edouard Jeanneret) (architect); La Chaux De Fonds, Switz., Oct. 6, 1887.
- LEE, Gypsy Rose** (Rose Hovic) (entertainer); Seattle, Wash., Feb. 9, 1914.
- LEE, Peggy** (singer); Jamestown, N. Dak., 1921.
- LE GALLIENNE, Eva** (actress & director); London, Eng., Jan. 11, 1899.
- LÉGER, Fernand** (painter); near Liseaux, Fr., Feb. 1881.
- LEHMANN, Lotte** (soprano); Perleberg, Ger., July 2, 1885.
- LEHMANN, Rosamond** (novelist); London, Eng., 1903.
- LEIGH, Janet** (Jeanette Morrison) (actress); Merced, Calif., July 6, 1927.
- LEIGH, Vivien** (Vivian Hartley) (actress); Darjeeling, India, Nov. 5, 1913.
- LEINSDORF, Erich** (orchestra conductor); Vienna, Aus., Feb. 4, 1912.
- LERNER, Max** (social writer); Minsk, Rus., Dec. 20, 1902.
- LEROY, Mervyn** (movie producer & director); San Francisco, Calif., Oct. 15, 1900.
- LESLIE, Joan** (Joan Brodell) (actress); Detroit, Mich., Jan. 26, 1925.
- LEVANT, Oscar** (pianist); Pittsburgh, Pa., Dec. 27, 1906.
- LEVENE, Sam** (actor); New York City, 1907.
- LEVENSON, Sam** (comedian); Russia, Dec. 28, 1911.
- LEVI, Carlo** (novelist); Turin, It., 1902.
- LEWIS, Jerry** (comedian); Newark, N. J., Mar. 16, 1926.
- LEWIS, Joe E.** (comedian); New York City, 1907.
- LEWIS, John L.** (labor leader); Lucas, Iowa, Feb. 12, 1880.
- LEWIS, Monica** (singer & actress); Chicago, Ill., May 5.
- LEWISOHN, Ludwig** (novelist & critic); Berlin, Ger., May 30, 1883.
- LIBERACE** (Wladzin Liberace) (pianist); West Milwaukee, Wis., May 1920.
- LIE, Trygve** (former U. N. Secretary General); Oslo, Nor., July 16, 1896.
- LILLIE, Beatrice** (actress); Toronto, Can., May 29, 1898.
- LILLIENTHAL, David E.** (U. S. statesman); Morton, Ill., July 8, 1899.
- LIN Yutang** (philosopher); Changchow, China, Oct. 10, 1895.
- LINDBERGH, Charles A.** (aviator); Detroit, Mich., Feb. 4, 1902.
- LINDSAY, Howard** (dramatist); Waterford, N. Y., Mar. 29, 1889.
- LIPCHITZ, Jacques** (sculptor); Druskielniki, Lith., Aug. 22, 1891.
- LIPPMANN, Walter** (social writer); New York City, Sept. 23, 1889.
- LIST, Emanuel** (basso); Vienna, Aus., Mar. 22, 1891.
- LIST, Eugene** (pianist); Calif., 1921.
- LITTLE, Lou** (football coach); Leominster, Mass., Dec. 6, 1893.
- LIVESY, Roger** (actor); Barry, Wales, June 25, 1906.
- LLEWELLYN, Richard** (novelist); St. David's, Wales.
- LLOYD, Harold** (comedian); Burchard, Nebr., Apr. 20, 1894.
- LOCKE, Bobby** (Arthur D.) (golfer); Germiston, Transvaal, So. Af., Nov. 20, 1917.
- LOCKHART, Gene** (actor); London, Can., July 25, 1892.
- LOCKWOOD, Margaret** (actress); Karachi, India, 1916.
- LOESSER, Frank** (song writer); New York City, June 29, 1910.
- LOGAN, Joshua** (director & dramatist); Texarkana, Tex., Oct. 5, 1908.
- LOMBARDO, Guy** (band leader); London, Can., June 19, 1902.
- LOOS, Anita** (novelist); Sisson, Calif., Apr. 26, 1893.
- LOPEZ, Al** (baseball manager); Tampa, Fla., Aug. 20, 1908.
- LOPEZ, Vincent** (band leader); Brooklyn, N. Y., Dec. 10, 1898.
- LORRE, Peter** (actor); Rosenberg, Hung., June 26, 1904.
- LOUIS, Joe** (Joe Louis Barrow) (boxer); Lexington, Ala., May 13, 1914.
- LOVEJOY, Frank** (actor); New York City, Mar. 28.
- LOW, David** (cartoonist); Dunedin, N. Z., Apr. 7, 1891.
- LOWELL, Robert** (Trall Spence, Jr.) (poet); Boston, Mass., Mar. 1, 1917.
- LOY, Myrna** (Myrna Williams) (actress); near Helena, Mont., Aug. 2, 1905.
- LUCE, Henry R.** (publisher); Shantung, China, Apr. 3, 1898.
- LUCKMAN, Sid** (football player); Brooklyn, N. Y., Nov. 21, 1916.
- LUGOSI, Bela** (Bela Lugosi Blasko) (actor); Lugo, Hung., Oct. 20, 1888.
- LUKAS, Paul** (actor); Budapest, Hung., May 26, 1895.

- LUND, John (actor); Rochester, N. Y., Feb. 6, 1914.
- LUNT, Alfred (actor); Milwaukee, Wis., 1893.
- LUPINO, Ida (actress); London, Eng., Feb. 4, 1918.
- LYNN, Diana (Dolly Loehr) (actress); Los Angeles, Calif., Oct. 7, 1926.
- LYTELL, Bert (actor & director); New York City, 1885.
- MacARTHUR, Charles (dramatist); Scranton, Pa., Nov. 5, 1895.
- MacARTHUR, Douglas (U. S. general); Little Rock Barracks, Ark., Jan. 26, 1880.
- McBRIDE, Mary Margaret (author); Paris, Mo., Nov. 16, 1899.
- McCAMBRIDGE, Mercedes (actress); Joliet, Ill., Mar. 17, 1918.
- McCAREY, Leo (movie director); Los Angeles, Calif., Oct. 3, 1898.
- McCARTHY, Joe (baseball manager); Philadelphia, Pa., Apr. 21, 1887.
- McCORMICK, Robert R. (publisher); Chicago, Ill., July 30, 1880.
- McCREA, Joel (actor); Los Angeles, Calif., Nov. 5, 1906.
- McCULLERS, Carson (novelist & dramatist); Columbus, Ga., Feb. 19, 1917.
- McDONALD, David J. (labor leader); Pittsburgh, Pa., Nov. 22, 1902.
- MacDONALD, Jeanette (soprano); Philadelphia, Pa., June 18, 1907.
- McDOWALL, Roddy (actor); London, Eng., Sept. 17, 1928.
- MacFADDEN, Bernarr (physical culturist); nr. Mill Springs, Mo., Aug. 16, 1868.
- McGEE, Fibber (James Jordan) (actor); Peoria, Ill., Nov. 16, 1896.
- McGEE, Molly (Marian Jordan) (actress); Peoria, Ill., Apr. 15, 1898.
- MacGRATH, Leueen (actress & dramatist); London, Eng., July 3, 1914.
- McGUIRE, Dorothy (actress); Omaha, Nebr., June 14, 1919.
- MACK, Connie (baseball executive); East Brookfield, Mass., Dec. 23, 1862.
- McKECHNIE, William B. (baseball coach); Wilkinsburg, Pa., Aug. 7, 1877.
- McLAGLEN, Victor (actor); Tunbridge Wells, Eng., Dec. 11, 1886.
- McLEISH, Archibald (poet); Glencoe, Ill., May 7, 1892.
- McMANUS, George (cartoonist); St. Louis, Mo., Jan. 23, 1884.
- MacMURRAY, Fred (actor); Kankakee, Ill., Aug. 30, 1908.
- McRAE, Gordon (singer); East Orange, N. J., Mar. 12, 1921.
- MAGNANI, Anna (actress); Alexandria, Egy., 1910.
- MAGSAYSAY, Ramón (Philippines statesman); Iba, Luzon, Aug. 31, 1907.
- MAILER, Norman (novelist); Long Branch, N. J., Jan. 31, 1923.
- MALAN, Daniel F. (South African statesman); Riebeek West, So. Af., May 22, 1874.
- MALENKOV, Georgi M. (Soviet statesman); Orenburg, Rus., Jan. 8, 1902.
- MALIK, Yakob (Soviet diplomat); Kharkov, Ukr., 1906.
- MALRAUX, André (novelist); Paris, Fr., Nov. 3, 1895.
- MANGANO, Silvana (actress); Rome, It.
- MANGRUM, Lloyd (golfer); Dallas, Tex., Aug. 1, 1914.
- MANKIEWICZ, Joseph L. (movie director); Wilkes-Barre, Pa., Feb. 11, 1909.
- MANN, Thomas (novelist); Lübeck, Ger., June 6, 1875.
- MANSHIP, Paul (sculptor); St. Paul, Minn., Dec. 25, 1885.
- MAO Tse-tung (Chinese statesman); Shao Shan, China, 1893.
- MARBLE, Alice I. (tennis player); Plumas Co., Calif., Sept. 28, 1913.
- MARCH, Fredric (Frederick Bickel) (actor); Racine, Wis., Aug. 31, 1897.
- MARCIANO, Rocky (boxer); Brockton, Mass., Sept. 1, 1924.
- MARGO (Maria Boldao y Castilla) (actress); Mexico City, Mex., May 10, 1918.
- MARION, Marty (baseball manager); Richburg, S. C., Dec. 1, 1917.
- MARITAIN, Jacques (philosopher); Paris, Fr., Nov. 18, 1882.
- MARKOVA, Alicia (dancer); London, Eng., Dec. 1, 1910.
- MARLOWE, Hugh (Hugh Hipple) (actor); Philadelphia, Pa.
- MARQUAND, John P. (novelist); Wilmington, Del., Nov. 10, 1893.
- MARSH, Ngalo (novelist); Christchurch, N. Z., Apr. 23, 1899.
- MARSHALL, George C. (U. S. general); Uniontown, Pa., Dec. 31, 1880.
- MARSHALL, Herbert (actor); London, Eng., May 23, 1890.
- MARTIN, Dean (comedian); Steubenville, Ohio, June 7, 1917.
- MARTIN, Mary (actress); Weatherford, Tex., Dec. 1, 1914.
- MARTIN, Tony (actor & singer); San Francisco, Calif., Dec. 25, 1914.
- MARTINELLI, Giovanni (tenor); Montagnana, It., Oct. 22, 1885.
- MARTINU, Bohuslav (composer); Policka, Czech., Dec. 8, 1890.

- MARX, Chico (Leonard) (comedian); New York City, Mar. 22, 1891.
- MARX, Groucho (Julius) (comedian); New York City, Oct. 2, 1895.
- MARX, Harpo (Arthur) (comedian); New York City, Nov. 23, 1893.
- MASEFIELD, John (poet); Ledbury, Eng., June 1, 1878.
- MASON, F. van Wyck (novelist); Boston, Mass., Nov. 11, 1901.
- MASON, James (actor); Huddersfield, Eng., May 15, 1909.
- MASSEY, Ilona (Ilona Hajmassy) (actress); Hungary, 1910.
- MASSEY, Raymond (actor); Toronto, Can., Aug. 30, 1896.
- MASSINE, Léonide (choreographer); Moscow, Rus., Aug. 9, 1896.
- MATHIAS, Bob (athlete); Tulare, Calif., Nov. 17, 1930.
- MATISSE, Henri (painter); Cateau, Fr., Dec. 31, 1869.
- MATTSON, Henry (painter); Göteborg, Swed., Aug. 7, 1887.
- MATURE, Victor (actor); Louisville, Ky., Jan. 29, 1916.
- MAUGHAM, William Somerset (novelist); Paris, Fr., Jan. 25, 1874.
- MAULDIN, William H. (cartoonist); Mountain Park, N. Mex., Oct. 29, 1921.
- MAUROIS, André (Émile Herzog) (novelist); Elbeuf, Fr., July 26, 1885.
- MAXIM, Joey (Giuseppe Antonio Berardinelli) (boxer); Cleveland, Ohio, Mar. 28, 1922.
- MAXWELL, Marilyn (actress); Clarinda, Iowa.
- MAYER, Louis B. (movie producer); Minsk, Rus., July 4, 1885.
- MAYNOR, Dorothy (soprano); Norfolk, Va., Sept. 3, 1910.
- MAYO, Virginia (Virginia Jones) (actress); St. Louis, Mo., Nov. 30, 1920.
- MEANY, George (labor leader); New York City, Aug. 16, 1894.
- MEDINA, Harold R. (U. S. jurist); Brooklyn, N. Y., Feb. 16, 1888.
- MEEKER, Ralph (Ralph Rathgeber) (actor); Minneapolis, Minn., Nov. 21, 1920.
- MEITNER, Lise (physicist); Vienna, Aus., Nov. 7, 1878.
- MELCHIOR, Lauritz (tenor); Copenhagen, Den., Mar. 20, 1890.
- MELTON, James (tenor); Moultrie, Ga., Jan. 2, 1904.
- MENCKEN, Henry L. (editor & author); Baltimore, Md., Sept. 12, 1880.
- MENDÈS-FRANCE, Pierre (French Statesman); Paris, Fr., Jan. 11, 1905.
- MENJOU, Adolphe (actor); Pittsburgh, Pa., Feb. 18, 1890.
- MENOTTI, Gian-Carlo (composer); Cadelgiano, It., July 7, 1911.
- MENUHIN, Yehudi (violinist); New York City, Apr. 22, 1916.
- MENZIES, Robert G. (Australian statesman); Jeparit, Aus., Dec. 20, 1894.
- MERCER, Johnny (singer & song writer); Savannah, Ga., Nov. 18, 1909.
- MEREDITH, Burgess (actor); Cleveland, Ohio, Nov. 16, 1908.
- MERKEL, Una (actress); Covington, Ky., Dec. 10, 1903.
- MERMAN, Ethel (Ethel Zimmerman) (actress & singer); Astoria, N. Y., Jan. 16, 1909.
- MERRILL, Robert (baritone); Brooklyn, N. Y., June 4, 1919.
- MERRIMAN, Nan (mezzo-soprano); Pittsburgh, Pa., Apr. 28, 1920.
- MERTON, Thomas (poet & religious writer); Prades, Fr., Jan. 31, 1915.
- MESSIAEN, Olivier (composer); Avignon, Fr., Dec. 10, 1908.
- MESTROVIĆ, Ivan (sculptor); Vrpolje, Yugos., Aug. 15, 1883.
- MEYER, Eugene (publisher); Los Angeles, Calif., Oct. 31, 1875.
- MICHENER, James A. (novelist); New York City, Feb. 3, 1907.
- MIDDLECOFF, Cary (golfer); Halls, Tenn., Jan. 6, 1921.
- MIELZINER, Jo (stage designer); Paris, Fr., Mar. 19, 1901.
- MILANOV, Zinka (soprano); Zagreb, Yugos., May 17, 1908.
- MILHAUD, Darius (composer); Aix-en-Provence, Fr., Sept. 4, 1892.
- MILLAND, Ray (Jack Millane) (actor); Neath, Wales, Jan. 3, 1907.
- MILLER, Arthur (dramatist); New York City, 1915.
- MILNE, Alan A. (novelist & dramatist); London, Eng., Jan. 18, 1882.
- MILSTEIN, Nathan (violinist); Odessa, Rus., Dec. 31, 1904.
- MINTON, Sherman (U. S. jurist); Georgetown, Ind., Oct. 20, 1890.
- MIRANDA, Carmen (Maria do Carmo Miranda da Cunha) (singer); Marco Canavezes, Port., 1915.
- MIRÓ, Joan (painter); Barcelona, Sp., Apr. 21, 1893.
- MITCHELL, Millard (actor); Havana, Cuba, 1903.
- MITCHELL, Thomas (actor); Elizabeth, N. J., July 11, 1895.



- MITCHUM, Robert (actor); Rising Sun, Del.
- MITFORD, Nancy (novelist); 1904.
- MITROPOULOS, Dimitri (orchestra conductor); Athens, Gr., Feb. 18, 1896.
- MOISEVITCH, Benno (pianist); Odessa, Rus., Feb. 22, 1890.
- MOLOTOV, Vyacheslav M. (V. M. Skryabin) (Soviet statesman); Kukarka, Rus., Mar. 9, 1890.
- MONROE, Marilyn (Norma Daugherty) (actress); Los Angeles, June 1, 1928.
- MONROE, Vaughn (band leader); Akron, Ohio, Oct. 7, 1912.
- MONSARRAT, Nicholas (novelist); Liverpool, Eng., Mar. 22, 1910.
- MONTEUX, Pierre (orchestra conductor); Paris, Fr., Apr. 4, 1875.
- MONTGOMERY, Robert (Henry, Jr.) (actor); Beacon, N. Y., May 21, 1904.
- MOORE, Douglas Stuart (composer); Cutchogue, N. Y., Aug. 10, 1893.
- MOORE, Henry (sculptor); Castleford, Eng., July 30, 1898.
- MOORE, Marianne (poet); St. Louis, Mo., Nov. 15, 1887.
- MOORE, Victor (actor); Hammondon, N. J., Feb. 24, 1876.
- MOOREHEAD, Agnes (actress); Clinton, Mass., Dec. 6, 1906.
- MORGAN, Charles (novelist); Kent, Eng., Jan. 22, 1894.
- MORGAN, Dennis (Stanley Morner) (actor); Prentice, Wis., Dec. 10, 1920.
- MORGAN, Michele (Simone Roussel) (actress); Paris, Fr., Feb. 29, 1920.
- MORGAN, Ralph (actor); New York City, July 6, 1888.
- MORINI, Erica (violinist); Vienna, Aus., Jan. 5, 1910.
- MORLEY, Christopher (novelist); Haverford, Pa., May 5, 1890.
- MORLEY, Robert (actor); Wiltshire, Eng., May 26, 1908.
- MOSES, Grandma (Anna Mary) (painter); Greenwich, N. Y., Sept. 7, 1860.
- MOSES, Robert (public official); New Haven, Conn., Dec. 18, 1888.
- MOSSADEGH, Mohammed (Iranian statesman); Teheran, Persia, 1880(?).
- MOTHERWELL, Robert (painter); Aberdeen, Wash., Jan. 24, 1915.
- MOTLEY, Willard (novelist); Chicago, Ill., July 14, 1912.
- MUENCH, Charles (orchestra conductor); Strasbourg, Ger., Sept. 1891.
- MULLOY, Gardnar (tennis player); Miami, Fla., Nov. 22, 1914.
- MUMFORD, Lewis (author); Flushing, N. Y., Oct. 19, 1895.
- MUNI, Paul (Muni Weisenfreund) (actor); Lemberg, Aus., Sept. 22, 1895.
- MUNSEL, Patrice (soprano); Spokane, Wash., May 14, 1925.
- MURPHY, George (actor); New Haven, Conn., July 4, 1904.
- MURRAY, Arthur (dancing teacher); New York City, Apr. 4, 1895.
- MURRAY, Ken (Don Court) (actor); New York City, July 14, 1903.
- MURROW, Edward R. (radio commentator); Greensboro, N. C.
- MUSIAL, Stan (baseball player); Donora, Pa., Nov. 21, 1920.
- NAGLER, Fred (painter); Springfield, Mass., Feb. 27, 1891.
- NAGUIB, Mohammed (Egyptian statesman); Khartoum, Egy., Feb. 20, 1901.
- NAGURSKI, Bronko (football player); International Falls, Minn., Nov. 8, 1908.
- NAISH, J. Carrol (actor); New York City, Jan. 21, 1900.
- NASH, Ogden (poet); Rye, N. Y., Aug. 19, 1902.
- NASSER, Gamal Abdel (Egyptian statesman); Egypt, c.1918.
- NATHAN, George Jean (theater critic); Ft. Wayne, Ind., Feb. 14, 1882.
- NATHAN, Robert (novelist); New York City, Jan. 2, 1894.
- NATWICK, Mildred (actress); Baltimore, Md., June 19, 1908.
- NEAGLE, Anna (Marjorie Robertson) (actress); nr. London, Eng., Oct. 20, 1904.
- NEGRI, Pola (Appollonia Chalupec) (actress); Lipno, Pol., 1899.
- NEHRU, Jawaharlal (Indian statesman); Allahabad, India, Nov. 14, 1889.
- NELSON, Ozzie (Oswald) (band leader); Jersey City, N. J., 1906.
- NENNI, Pietro (Italian Socialist leader); Faenza, It., Feb. 9, 1891.
- NEVINS, Allan (historian); Camp Point, Ill., May 20, 1890.
- NEWTON, Robert (actor); Shaftesbury, Dorset, Eng., June 1, 1905.
- NICHOLS, Dudley (stage producer & director); Wapakoneta, Ohio, Apr. 6, 1895.
- NIEBUHR, Reinhold (clergyman); Wright City, Mo., June 21, 1892.
- NIVEN, David (actor); Scotland.
- NIXON, Richard M. (U. S. statesman); Yorba Linda, Calif., Jan. 9, 1913.
- NOBEL, Ray (band leader); Brighton, Eng., Dec. 17, 1908.
- NOGUCHI, Isamu (sculptor); Los Angeles, Calif., Nov. 7, 1904.

- NOLAN, Lloyd (actor); San Francisco, Calif.
- NORRIS, Kathleen (novelist); San Francisco, Calif., July 16, 1880.
- NOVAES, Guiomar (pianist); São João de Boa Vista, Braz., Feb. 28, 1895.
- NOVOTNA, Jarmila (soprano); Prague, Czech., Sept. 23, 1911.
- NOYES, Alfred (poet); Wolverhampton, Eng., Sept. 16, 1880.
- NUGENT, Elliott (actor & director); Dover, Ohio, Sept. 20, 1899.
- OBERON, Merle (Merle O'Brien Thompson) (actress); Tasmania, Feb. 19, 1911.
- O'BRIEN, Edmond (actor); New York City, Sept. 10, 1915.
- O'BRIEN, Margaret (actress); Los Angeles, Calif., Jan. 15, 1937.
- O'BRIEN, Pat (actor); Milwaukee, Wis., Nov. 11, 1899.
- O'CASEY, Sean (dramatist); Dublin, Ire., 1881.
- O'CONNOR, Donald (actor); Chicago, Ill., Aug. 28, 1925.
- ODETS, Clifford (dramatist); Philadelphia, Pa., July 18, 1906.
- O'FAOLAIN, Seán (story writer); Cork, Ire., Feb. 22, 1900.
- O'FLAHERTY, Liam (novelist); Aran Is., Ire., 1897.
- O'HARA, John (novelist); Pottsville, Pa., Jan. 31, 1905.
- O'HARA, Maureen (Maureen FitzSimons) (actress); Milltown, Ire., Aug. 17, 1921.
- O'KEEFE, Georgia (painter); Sun Prairie, Wis., Nov. 15, 1887.
- O'KELLY, Sean T. (Irish statesman); Dublin, Ire., Aug. 25, 1882.
- OLIVIER, Sir Laurence (actor); Dorking, Eng., May 22, 1907.
- OLSEN, Ole (John) (comedian); Wabash, Ind., Nov. 6, 1892.
- O'NEILL, Steve (baseball manager); Minnoka, Pa., July 6, 1891.
- OPPENHEIMER, J. Robert (physicist); New York City, Apr. 22, 1904.
- ORMANDY, Eugene (orchestra conductor); Budapest, Hung., Nov. 18, 1899.
- O'SULLIVAN, Maureen (actress); Boyle, Ire., May 17, 1911.
- OTT, Mel (Melvin T.) (baseball player); Gretna, La., Mar. 2, 1909.
- OWEN, Reginald (actor); Weathampstead, Eng., Aug. 5, 1887.
- OWEN, Steve (football coach); Cleo Springs, Okla., Apr. 21, 1898.
- OWENS, Jesse (sprinter); Decatur, Ala., Sept. 12, 1913.
- PALEY, William S. (broadcasting executive); Chicago, Ill., Sept. 28, 1901.
- PALMER, Lilli (actress); Posen, Germany, May 27, 1917.
- PARKER, Dorothy (poet & story writer); West End, N. J., Aug. 22, 1893.
- PARKER, Eleanor (actress); Cedarville, Ohio, June 26, 1922.
- PARKER, Jean (Mae Green) (actress); Deer Lodge, Mont.
- PARKS, Larry (actor); Olathe, Kans.
- PASTERNAK, Joseph (movie producer); Simleul-Silvaniel, Rum., Sept. 19, 1901.
- PATON, Alan (novelist); Pietermaritzburg, So. Af., Jan. 11, 1903.
- PATRICK, Lester (hockey executive); Drummondville, Que., Can., Dec. 31, 1883.
- PAUL I (King of Greece); Athens, Gr., Dec. 14, 1901.
- PAUL, Elliot (novelist); Malden, Mass., Feb. 13, 1891.
- PAXINO, Katina (actress); Piraeus, Greece.
- PAYNE, John (actor); Roanoke, Va.
- PEARSON, Drew (columnist); Evanston, Ill., Dec. 13, 1897.
- PEARSON, Hesketh (author); Hawford, Worcs., Eng., Feb. 20, 1887.
- PEARSON, Lester B. (Canadian cabinet member); Toronto, Ont., Can., Apr. 23, 1897.
- PEATIE, Donald Culross (nature writer); Chicago, Ill., June 21, 1898.
- PECK, Gregory (actor); La Jolla, Calif., Apr. 5, 1916.
- PEERCE, Jan (Jacob Pincus Perelmuth) (tenor); New York City, 1904.
- PEGLER, Westbrook (columnist); Minneapolis, Minn., Aug. 2, 1894.
- PEIRCE, Waldo (painter); Bangor, Maine, Dec. 17, 1884.
- PEP, Willie (William Papaleo) (boxer); Middletown, Conn., Nov. 20, 1922.
- PERELMAN, Sidney J. (humorist); Brooklyn, N. Y., Feb. 1, 1904.
- PERÓN, Juan D. (Argentine statesman); nr. Lobos, Arg., Oct. 8, 1895.
- PETERS, Jean (actress); Canton, Ohio, Oct. 15.
- PETRI, Egon (pianist); Hanover, Ger., Mar. 23, 1881.
- PIAF, Edith (singer); Paris, Fr.
- PIASTRO, Mishel (violinist & conductor); Kertz, Rus., June 1892.
- PIATIGORSKY, Gregor (cellist); Ekaterinograd, Rus., Apr. 17, 1903.
- PICASSO, Pablo (painter); Málaga, Sp., Oct. 25, 1881.

- PICCARD, Auguste (physicist); Basel, Switz., Jan. 28, 1884.
- PICCARD, Jean Félix (aeronautics engineer); Basel, Switz., Jan. 28, 1884.
- PICKFORD, Mary (Gladys Mary Smith) (actress); Toronto, Can., Apr. 8, 1893.
- PIDGEON, Walter (actor); East St. John, Can., Sept. 23, 1898.
- PINAY, Antoine (French statesman); St.-Symphorien-sur-Coise, Fr., Dec. 30, 1891.
- PINZA, Ezio (basso); Rome, It., May 18, 1892.
- PISTON, Walter (composer); Rockland, Maine, Jan. 20, 1894.
- PITTS, Zasu (actress); Parsons, Kans., Jan. 3, 1898.
- PIUS XII (Eugenio Pacelli) (Pope); Rome, It., Mar. 2, 1876.
- POLLACK, Jackson (painter); Cody, Wyo., Feb. 7, 1912.
- PONS, Lily (soprano); Cannes, Fr., Apr. 13, 1904.
- PONSELLE, Rosa (soprano); Meriden, Conn., Jan. 22, 1897.
- PORTER, Cole (song writer); Peru, Ind., June 9, 1893.
- PORTER, Katherine Anne (story writer); Indian Creek, Tex., May 15, 1894.
- POULENC, Francis (composer); Paris, Fr., Jan. 7, 1899.
- POUND, Ezra (poet); Halley, Idaho, Oct. 30, 1885.
- POWELL, Dick (actor); Mt. View, Ark., Nov. 14, 1904.
- POWELL, Jane (Suzanne Burce) (actress); Portland, Oreg., Apr. 1, ??.
- POWELL, William (actor); Pittsburgh, Pa., July 29, 1892.
- POWER, Tyrone (actor); Cincinnati, Ohio, May 5, 1914.
- POWERS, Marie (contralto); Mt. Carmel, Pa.
- PRATT, Fletcher (historian); Buffalo, N. Y., Apr. 25, 1897.
- PREMINGER, Otto (movie producer & director); Vienna, Aus., Dec. 5, 1906.
- PRICE, George (cartoonist); Coytesville, N. J., June 9, 1901.
- PRICE, Vincent (actor); St. Louis, Mo., May 27, 1911.
- PRIESTLEY, John B. (novelist & dramatist); Bradford, Eng., Sept. 13, 1894.
- PRIMOSE, William (violinist); Glasgow, Scot., Aug. 23, 1904.
- PRIMUS, Pearl (dancer); Trinidad, Nov. 29, 1921.
- PROKOSCH, Frederic (novelist); Madison, Wis., May 17, 1908.
- PULITZER, Joseph (publisher); New York City, Mar. 21, 1885.
- QUEVILLE, Henri (French statesman); Neuville d'Ussel, Fr., Mar. 31, 1884.
- QUINN, Anthony (actor); Chihuahua, Mex., Apr. 21, 1915.
- QUINTANILLA, Luis (painter); Santander, Sp., June 13, 1895.
- QUIRINO, Elpidio (Philippine statesman); Vigan, Luzon, Phil., Nov. 16, 1890.
- RAFT, George (actor); New York City, Sept. 27, 19??.
- RAINER, Luise (actress); Vienna, Aus., 1912.
- RAINS, Claude (actor); London, Eng., Nov. 10, 1889.
- RAISA, Rosa (soprano); Bialystok, Pol., May 30, 1893.
- RALE, Torsten (tenor); Sweden, 1915.
- RANK, J. Arthur (movie producer); Hull, Eng., Dec. 23, 1888.
- RANSOM, John Crowe (poet); Pulaski, Tenn., Apr. 30, 1888.
- RATHBONE, Basil (actor); Johannesburg, So. Af., June 13, 1892.
- RATOFF, Gregory (movie director); Petrograd, Rus., Apr. 20, 1897.
- RATTIGAN, Terence (dramatist); London, Eng., June 10, 1911.
- RATTNER, Abraham (painter); Poughkeepsie, N. Y., July 8, 1895.
- RAY, Johnnie (singer); Roseburg, Oreg., Jan. 10, 1927.
- REAGAN, Ronald (actor); Tampico, Ill.
- REDGRAVE, Michael (actor); Bristol, Eng., Mar. 20, 1908.
- REED, Donna (actress); Denison, Iowa.
- REED, Stanley F. (U. S. jurist); Mason Co., Ky., Dec. 31, 1884.
- REID, Helen Rogers (publisher); Appleton, Wis., Nov. 23, 1882.
- REINER, Fritz (orchestra conductor); Budapest, Hung., Dec. 19, 1888.
- REMARQUE, Erich Maria (novelist); Osnabrück, Ger., June 22, 1898.
- RENNIE, Michael (actor); Bradford, Yorks., Eng., Aug. 25, 1909.
- RESTON, James (journalist); Clydebank, Scot., Nov. 3, 1909.
- RETHBERG, Elisabeth (soprano); Schwarzenberg, Ger., Dec. 22, 1894.
- REUTHER, Walter P. (labor leader); Wheeling, W. Va., Sept. 1, 1907.
- REYNAUD, Paul (French statesman); Barcelonnette, Fr., Oct. 15, 1878.
- REYNOLDS, Allie (baseball player); Bethany, Okla., Feb. 10, 1919.
- REYNOLDS, Debbie (Mary Reynolds) (actress); El Paso, Tex., Apr. 1, 1932.



- RHEE, Syngman (Korean statesman); Whanghal Prov., Kor., Apr. 26, 1875.
- RICE, Elmer (Elmer Reizenstein) (dramatist); New York City, Sept. 28, 1892.
- RICHARD, Maurice (hockey player); Montreal, Que., Can., Aug. 4, 1921.
- RICHARDS, Paul (baseball manager); Waxahachie, Tex., Nov. 21, 1908.
- RICHARDS, Vincent (tennis player); New York City, Mar. 20, 1903.
- RICHARDSON, Sir Ralph (actor); Cheltenham, Eng., Dec. 19, 1902.
- RICHTER, Conrad (novelist); Pine Grove, Pa., Oct. 13, 1890.
- RICKENBACKER, Edward V. (airline executive); Columbus, Ohio, Oct. 8, 1890.
- RICKEY, Branch (baseball executive); Senecaville, Ohio, Dec. 20, 1881.
- RINEHART, Mary Roberts (novelist); Pittsburgh, Pa.
- RITTER, Thelma (actress); Brooklyn, N. Y., 1905.
- RIVERA, Diego (painter); Guanajuato, Mex., Dec. 8, 1886.
- RIZZUTO, Phil (baseball player); New York City, Sept. 25, 1918.
- ROARK, Helen Wills Moody (tennis player); Centerville, Calif., Oct. 6, 1905.
- ROBBINS, Jerome (Jerome Rabinowitz) (choreographer); New York City, Oct. 11, 1918.
- ROBERTS, Kenneth (novelist); Kennebunk, Maine, Dec. 8, 1885.
- ROBESON, Paul (baritone); Princeton, N. J., Apr. 9, 1898.
- ROBINSON, Edward G. (Emmanuel Goldenberg) (actor); Bucharest, Rum., Dec. 12, 1893.
- ROBINSON, Henry Morton (novelist); Boston, Mass., Sept. 7, 1898.
- ROBINSON, Jackie (baseball player); Cairo, Ga., Jan. 31, 1919.
- ROBINSON, Ray (boxer); Detroit, Mich., May 3, 1920.
- ROBSON, Flora (actress); South Shields, Eng., Mar. 28, 1902.
- ROCHESTER (Eddie Anderson) (comedian); Oakland, Calif., Sept. 18, 1905.
- ROCKEFELLER, John D., Jr. (industrialist); Cleveland, Ohio, Jan. 29, 1874.
- ROCKWELL, Norman (illustrator); New York City, Feb. 3, 1894.
- RODGERS, Richard (song writer); New York City, June 28, 1902.
- RODZINSKI, Artur (orchestra conductor); Spalato, Dalmatia, Jan. 2, 1892.
- ROGERS, Buddy (Charles) (actor); Olathe, Kans., Aug. 13, 1904.
- ROGERS, Ginger (Virginia McMath) (actress); Independence, Mo., July 16, 1911.
- ROGERS, Roy (Leonard Slye) (actor); Cincinnati, Ohio, Nov. 5, 1912.
- ROLAND, Gilbert (Luis de Alonso) (actor); Juarez, Mex., Dec. 11, 1905.
- ROMAINS, Jules (Louis Farigoule) (novelist); Saint-Julien Chapeuil, Fr., Aug. 26, 1885.
- ROMAN, Ruth (actress); Boston, Mass., Dec. 23, 1924.
- ROMANO, Umberto (painter); Bracigliano, It., Feb. 26, 1905.
- ROMERO, Cesar (actor); New York City, Feb. 15, 1907.
- ROMULO, Carlos P. (Philippine statesman); Manila, Phil., Jan. 14, 1899.
- ROONEY, Mickey (Joe Yule, Jr.) (actor); Brooklyn, N. Y., Sept. 23, 1922.
- ROOSEVELT, Eleanor (U. S. statesman); New York City, Oct. 11, 1884.
- ROSE, Billy (Wm. S. Rosenberg) (stage producer); New York City, Sept. 6, 1899.
- ROSE, Leonard (cellist); 1918.
- ROSSELLINI, Roberto (movie director); Rome, It., May 8, 1906.
- ROUAULT, Georges (painter); Paris, Fr., May 27, 1871.
- RUBINSTEIN, Artur (pianist); Warsaw, Pol., Jan. 28, 1889.
- RUGGLES, Charles (actor); Los Angeles, Calif., Feb. 8, 1892.
- RUSSELL, Bertrand (philosopher); Trelleck, Eng., May 18, 1872.
- RUSSELL, Jane (actress); Bemidji, Minn., June 21, 1921.
- RUSSELL, Rosalind (actress); Waterbury, Conn., June 4, 1912.
- RYAN, Robert (actor); Chicago, Ill., Nov. 11, 1913.
- SABLON, Jean (singer); Paris, Fr., Mar. 25, 1912.
- SACKVILLE-WEST, Victoria (poet & novelist); Sevenoaks, Eng., Mar. 9, 1892.
- SADDLER, Sandy (Joe) (boxer); Boston, Mass., June 28, 1926.
- SAIDENBERG, Daniel (orchestra conductor); Winnipeg, Can., Oct. 12, 1906.
- ST. DENIS, Ruth (Ruth Denis) (dancer); Newark, N. J., Jan. 20, 1880.
- ST. LAURENT, Louis Stephen (Canadian statesman); Compton, Que., Can., Feb. 1, 1882.
- SALAZAR, António de Oliveira (Portuguese statesman); Santa Comba, Port., 1889.
- SALINGER, J. D. (novelist); New York City, Jan. 1, 1919.
- SALISBURY, Marquess of (Robert Arthur James Cecil) (British statesman); England, Aug. 27, 1893.

- SALZEDO, Carlos (harpist); Arachon, Fr., Apr. 6, 1885.
- SAMPLE, Paul (painter); Louisville, Ky., Sept. 14, 1896.
- SANDBURG, Carl (poet & biographer); Galesburg, Ill., Jan. 6, 1878.
- SANDE, Earl (horse trainer); Groton, S. Dak., Nov. 19, 1898.
- SANDERS, George (actor); St. Petersburg, Rus., 1906.
- SÁNDOR, György (pianist); Budapest, Hung., Sept. 21, 1912.
- SANROMÁ, Jesús María (pianist); Carolina, P. R., Nov. 7, 1902.
- SARAZEN, Gene (golfer); Harrison, N. Y., Feb. 27, 1902.
- SARNOFF, David (radio executive); Uzzlian, Rus., Feb. 27, 1891.
- SAROYAN, William (story writer & dramatist); Fresno, Calif., Aug. 31, 1908.
- SARTRE, Jean-Paul (philosopher); Paris, Fr., June 21, 1905.
- SASSOON, Siegfried (poet); Matfield, Eng., Sept. 8, 1886.
- SAVITT, Dick (tennis player); Bayonne, N. J., Mar. 4, 1927.
- SAVO, Jimmie (entertainer); New York City, 1895.
- SAYÃO, Bidú (soprano); Rio De Janeiro, Braz., May 11, 1906.
- SCELBA, Mario (Italian statesman); Sicily, Sept. 5, 1901.
- SCHAEFER, Jake (billiards player); Chicago, Ill., Oct. 18, 1894.
- SCHARY, Dore (movie producer); Newark, N. J., Aug. 31, 1905.
- SCHILDKRAUT, Joseph (actor); Vienna, Aus., Mar. 22, 1895.
- SCHIÖTZ, Aksel (tenor); Roskilde, Den., Sept. 1, 1906.
- SCHIPA, Tito (tenor); Lecce, It., Jan. 2, 1890.
- SCHLESINGER, Arthur M., Jr. (historian); Columbus, Ohio, Oct. 15, 1917.
- SCHLESINGER, Arthur M., Sr. (historian); Xenia, Ohio, Feb. 27, 1888.
- SCHNEIDER, Alexander (violinist); Vilna, Pol., Dec. 21, 1908.
- SCHROEDER, Ted (tennis player); Newark, N. J., July 20, 1921.
- SCHULBERG, Budd (novelist); New York City, Mar. 27, 1914.
- SCHUMAN, Robert (French statesman); Luxemburg, Luxem., June 29, 1886.
- SCHUMAN, William (composer); New York City, Aug. 4, 1910.
- SCHWEITZER, Albert (organist, physician & author); Kayserburg, Alsace, Jan. 14, 1875.
- SCOTT, Barbara Ann (skater); Ottawa, Can., May 9, 1928.
- SCOTT, Hazel (pianist); Port of Spain, Trin., June 11, 1920.
- SCOTT, Lizabeth (actress); Scranton, Pa., Sept. 29, 1923.
- SCOTT, Martha (actress); Jamesport, Mo., Sept. 22, 1916.
- SCOTT, Randolph (actor); Orange Co., Va., Jan. 23, 1903.
- SCOTT, Raymond (band leader); Brooklyn, N. Y., Sept. 10, 1909.
- SCOTT, Zachary (actor); Austin, Tex., Feb. 24, 1914.
- SEABORG, Glenn T. (nuclear chemist); Ishpeming, Mich., Apr. 19, 1912.
- SEDGMAN, Frank (tennis player); Mont Albert, Victoria, Austr., Oct. 29, 1927.
- SEGAL, Vivienne (singer); Philadelphia, Pa., 1897.
- SEGONZAC, André Dunoyer de (painter); France, 1885.
- SEGOVIA, Andrés (guitarist); Linares, Sp., Feb. 18, 1894.
- SEGURA, Francisco (tennis player); Guayaquil, Ec., June 20, 1921.
- SEIDEL, Toscha (violinist); Odessa, Rus., Nov. 17, 1889.
- SEIXAS, E. Victor, Jr. (tennis player); Philadelphia, Pa., Aug. 30, 1923.
- SELZNICK, David O. (movie producer); Pittsburgh, Pa., May 10, 1902.
- SERKIN, Rudolf (pianist); Eger, Boh., Mar. 28, 1903.
- SESSIONS, Roger (composer); Brooklyn, N. Y., Dec. 28, 1896.
- SEVITZKY, Fabien (Fabien Koussevitsky) (orchestra conductor); Vyshni-Volochek, Rus., Sept. 30, 1893.
- SHAHN, Ben (painter); Kovno, Rus., 1898.
- SHAPIRO, Karl (poet); Baltimore, Md., Nov. 10, 1913.
- SHAPLEY, Harlow (astronomer); Nashville, Mo., Nov. 2, 1885.
- SHAUGHNESSY, Frank J. (baseball executive); Albion, Ill., Apr. 8, 1885.
- SHAW, Artie (clarinetist); New York City, May 23, 1910.
- SHAW, Irwin (dramatist & novelist); New York City, Feb. 27, 1913.
- SHAW, Robert (choral director); Red Bluff, Calif., Apr. 30, 1916.
- SHAWN, Ted (Edwin) (dancer); Kansas City, Mo., Oct. 21, 1891.
- SHEARER, Moira (Moira Shearer King) (dancer); Dunfermline, Fife, Scot., Jan. 17, 1926.
- SHEARER, Norma (actress); Montreal, Can., Aug. 10, 1902.
- SHEEAN, Vincent (novelist & essayist); Pana, Ill., Dec. 5, 1899.
- SHEELER, Charles (painter); Philadelphia, Pa., July 16, 1883.

- SHEEN, Fulton J.** (clergyman & author); El Paso, Ill., May 8, 1895.
- SHERIDAN, Ann** (actress); Denton, Tex., Feb. 21, 1915.
- SHERIFF, Robert** (dramatist); Kingston-on-Thames, Eng., June 6, 1896.
- SHERWOOD, Robert E.** (dramatist); New Rochelle, N. Y., Apr. 4, 1896.
- SHOEMAKER, Vaughn** (cartoonist); Chicago, Ill., Aug. 11, 1902.
- SHOLOKHOV, Mikhail** (novelist); Veshenskaya, Rus., 1905.
- SHORE, Dinah** (singer); Winchester, Tenn., Mar. 1, 1917.
- SHOSTAKOVICH, Dmitri** (composer); Petrograd, Rus., Sept. 26, 1906.
- SHRINER, Herb** (comedian); Toledo, Ohio, May 29, 1918.
- SHULMAN, Max** (humorist); St. Paul, Minn., Mar. 14, 1919.
- SIBELIUS, Jean** (composer); Tavastehus, Fin., Dec. 8, 1865.
- SIDNEY, Sylvia** (Sophia Koskow) (actress); New York City, Aug. 8, 1910.
- SIKORSKY, Igor I.** (aircraft designer); Kiev, Rus., May 25, 1889.
- SILONE, Ignazio** (Secondo Tranquilli) (novelist); Pescina dei Marsi, It., May 1, 1900.
- SILVERS, Phil** (comedian); Brooklyn, N. Y., May 11, 1912.
- SIMENON, Georges** (Georges Sim) (novelist); Liéges, Belg., Feb. 13, 1903.
- SIMONSON, Lee** (stage designer); New York City, June 26, 1888.
- SINATRA, Frank** (singer); Hoboken, N. J., 1918.
- SINCLAIR, Upton** (novelist); Baltimore, Md., Sept. 20, 1878.
- SINGHER, Martial** (baritone); Oloron-St.-Marie, Fr., Aug. 14, 1904.
- SIQUEIROS, David** (painter); Mexico, 1894.
- SISLER, George H.** (baseball player); Manchester, Ohio, Mar. 24, 1893.
- SITWELL, Edith** (poet); Scarborough, Eng., 1887.
- SITWELL, Sir Osbert** (poet & satirist); London, Eng., Dec. 6, 1892.
- SKELTON, Red** (Richard) (comedian); Vincennes, Ind., July 18, 1913.
- SKINNER, Cornelia Otis** (actress); Chicago, Ill., May 30, 1901.
- SLEZAK, Walter** (actor); Vienna, Aus., May 3, 1902.
- SLOAN, Alfred P., Jr.** (business executive); New Haven, Conn., May 23, 1875.
- SMALLENS, Alexander** (orchestra conductor); Petrograd, Rus., Jan. 1, 1889.
- SMITH, Betty** (novelist); Brooklyn, N. Y., Dec. 15, 1904.
- SMITH, H. Allen** (humorist); McLeansboro, Ill., Dec. 19, 1907.
- SMITH, Kate** (Kathryn) (singer); Washington, D. C., 1910.
- SMITH, Kent** (actor); Smithville, Maine, Mar. 19, 1907.
- SMITH, Lillian** (novelist); Jasper, Fla., 1897.
- SMYTHE, Conn** (hockey executive); Toronto, Ont., Can., Feb. 1, 1895.
- SNEAD, Sam** (golfer); Hot Springs, Va., May 27, 1912.
- SOKOLOFF, Vladimir** (actor); Moscow, Rus., Dec. 26, 1889.
- SOLOMON** (Solomon Cutner) (pianist); London, Eng., 1902.
- SOTHERN, Ann** (Harriet Lake) (actress); Valley City, N. Dak., Jan. 22, 1911.
- SPAACK, Paul-Henri** (Belgian statesman); Brussels, Belg., Jan. 25, 1899.
- SPEAKER, Tris** (baseball player); Hubbard, Tex., Apr. 4, 1888.
- SPEICHER, Eugene** (painter); Buffalo, N. Y., Apr. 5, 1883.
- SPENDER, Stephen** (poet); nr. London, Eng., Feb. 28, 1909.
- SEWACK, Bella** (dramatist); Hungary, 1899.
- SPEWACK, Sam** (dramatist); Russia, 1899.
- SPILLANE, Mickey** (Frank Spillane) (novelist); Brooklyn, N. Y., Mar. 9, 1918.
- STAGG, A. Alonzo** (football coach); West Orange, N. J., Aug. 16, 1862.
- STALLINGS, Laurence** (novelist & dramatist); Macon, Ga., Nov. 25, 1894.
- STANWYCK, Barbara** (Ruby Stevens) (actress); Brooklyn, N. Y., July 16, 1907.
- STEBER, Eleanor** (soprano); Wheeling, W. Va., July 17, 1916.
- STEFANSSON, Vihljalmar** (explorer); Arnes, Can., Nov. 3, 1879.
- STEINBECK, John** (novelist); Salinas, Calif., Feb. 27, 1902.
- STEINBERG, Saul** (cartoonist); Ramnic-Sarat, Rum., June 15, 1914.
- STENGEL, Casey** (Charles D.) (baseball manager); Kansas City, Mo., July 30, 1891.
- STERN, Isaac** (violinist); Kreminiesy, Rus., July 21, 1920.
- STERNE, Maurice** (painter & sculptor); Libau, Rus., July 13, 1878.
- STEVENS, Rlsé** (mezzo-soprano); New York City, June 11, 1913.
- STEVENS, Wallace** (poet); Reading, Pa., Oct. 2, 1879.
- STEVENSON, Adlai E.** (U. S. statesman); Los Angeles, Calif., Feb. 5, 1900.



- STEWART, James (actor); Indiana, Pa., May 20, 1908.
- STICKNEY, Dorothy (actress); Dickinson, N. Dak., June 21, 1900.
- STIGNANI, Ebe (mezzo-soprano); Naples, It., July 10, 1907.
- STOKOWSKI, Leopold (orchestra conductor); London, Eng., Apr. 18, 1882.
- STONE, Ezra (actor & director); New Bedford, Mass., Dec. 2, 1917.
- STONE, Fred A. (actor); Valmont, Colo., Aug. 19, 1878.
- STONE, Irving (biographer); San Francisco, Calif., July 14, 1903.
- STONG, Philip (novelist); Keosauqua, Iowa, Jan. 27, 1899.
- STRANAHAN, Frank R. (golfer); Toledo, Ohio, Aug. 5, 1922.
- STRAVINSKY, Igor (composer); Oranienbaum, Rus., June 17, 1882.
- STREET, James (novelist); Lumberton, Miss., Oct. 15, 1903.
- STREETER, Edward (novelist); New York City, Aug. 1, 1891.
- STRIBLING, Thomas S. (novelist); Clifton, Tenn., Mar. 4, 1881.
- STRONG, Ken (football player); West Haven, Conn., Apr. 21, 1906.
- STUART, Jesse (poet & novelist); W-Hollow, Ky., Aug. 8, 1907.
- STURGES, Preston (Preston Biden) (dramatist & director); Chicago, Ill., Aug. 29, 1898.
- STYDAHAR, Joe (football coach); Kaylor, Pa., Mar. 3, 1912.
- SUCKOW, Ruth (novelist); Hawarden, Iowa, Aug. 6, 1892.
- SULLAVAN, Margaret (actress); Norfolk, Va., May 16, 1911.
- SULLIVAN, Barry (Patrick Barry) (actor); New York City, Aug. 29, 1912.
- SULLIVAN, Ed (columnist); New York City, Sept. 28, 1902.
- SULLIVAN, Francis L. (actor); London, Eng., Jan. 6, 1903.
- SULLIVAN, Frank (humorist); Saratoga Springs, N. Y., Sept. 22, 1892.
- SULZBURGER, Arthur H. (publisher); New York City, Sept. 12, 1891.
- SVANHOLM, Set (tenor); Vasteras, Swed., Sept. 2, 1904.
- SWANSON, Gloria (Josephine Swenson) (actress); Chicago, Ill., Mar. 27, 1898.
- SWARTHOUT, Gladys (mezzo-soprano); Deepwater, Mo., Dec. 25, 1904.
- SZELL, George (orchestra conductor); Budapest, Hung., June 7, 1897.
- SZIGETI, Joseph (violinist); Budapest, Hung., Sept. 5, 1892.
- TAGLIAVINI, Ferruccio (tenor); Reggio Emilia, It., Aug. 14, 1913.
- TAJO, Italo (basso); Pinerolo, It., Apr. 25, 1915.
- TALBERT, Billy (tennis player); Cincinnati, Ohio, Sept. 4, 1918.
- TALBURT, Harold M. (cartoonist); Toledo, Ohio, Feb. 19, 1895.
- TALCHIEF, Maria (dancer); Fairfax, Okla., Jan. 24, 1925.
- TAMAYO, Rufino (painter); Oaxaca, Mex., 1899.
- TANDY, Jessica (Jessica Cronyn) (actress); London, Eng., June 7, 1909.
- TANGUY, Yves (painter); France, 1900.
- TATE, Allen (poet); Winchester, Ky., Nov. 19, 1899.
- TAYLOR, Deems (composer); New York City, Dec. 22, 1885.
- TAYLOR, Elizabeth (actress); London, Eng., Feb. 27, 1932.
- TAYLOR, Robert (S. Arlington Brugh) (actor); Filley, Nebr., Aug. 5, 1911.
- TCHELITCHEW, Pavel (painter); nr. Moscow, Rus., Sept. 21, 1898.
- TEMPLE, Shirley (actress); Santa Monica, Calif., Apr. 23, 1928.
- TEMPLETON, Alec (pianist); Cardiff, Wales, July 4, 1910.
- TEYTE, Maggie (soprano); Wolverhampton, Eng., Apr. 17, 1891.
- THEBOM, Blanche (mezzo-soprano); Monessen, Pa., Sept. 19, 1919.
- THIBAUD, Jacques (violinist); Bordeaux, Fr., Sept. 27, 1880.
- THOMAS, Danny (comedian); Deerfield, Mich., Jan. 6, 1914.
- THOMAS, John Charles (baritone); Meyersdale, Pa., Sept. 6, 1891.
- THOMAS, Lowell (lecturer & author); Woodington, Ohio, Apr. 6, 1892.
- THOMAS, Norman M. (Socialist leader); Marion, Ohio, Nov. 20, 1884.
- THOMPSON, Randall (composer); New York City, Apr. 21, 1899.
- THOMSON, Virgil (composer & critic); Kansas City, Mo., Nov. 25, 1896.
- THORBORG, Kerstin (contralto); Venjan, Swed., May 19, 1906.
- THOREZ, Maurice (French Communist leader); Noyelles-Godault, Fr., Apr. 28, 1900.
- THURBER, James (humorist); Columbus, Ohio, Dec. 8, 1894.
- TIBBETT, Lawrence (baritone); Bakersfield, Calif., Nov. 16, 1896.
- TIERNEY, Gene (actress); Brooklyn, N. Y., Nov. 20, 1920.
- TITO (Josip Brozovich or Broz) (Yugoslav statesman); Kumrovec, Croatia, May 25, 1892.

- TODD, Ann (actress); Hartford, Ches., Eng., Jan. 24, 1910.
- TODD, Richard (actor); Dublin, Ire., 1920.
- TOGLIATTI, Palmiro (Italian Communist leader); Genoa, It., Mar. 26, 1893.
- TONE, Franchot (actor); Niagara Falls, N. Y., Feb. 27, 1905.
- TOSCANINI, Arturo (orchestra conductor); Palma, It., Mar. 25, 1867.
- TOUREL, Jennie (mezzo-soprano); Montreal, Can., June 22, 1910.
- TOYNBEE, Arnold J. (historian); London, Eng., Apr. 14, 1889.
- TRABERT, Tony (tennis player); Cincinnati, Ohio, Aug. 16, 1930.
- TRACY, Lee (actor); Atlanta, Ga., Apr. 14, 1898.
- TRACY, Spencer (actor); Milwaukee, Wis., Apr. 5, 1900.
- TRAUBEL, Helen (soprano); St. Louis, Mo., June 16, 1903.
- TRAUTMAN, George M. (baseball executive); Bucyrus, Ohio, Jan. 11, 1890.
- TRAVERS, Henry (actor); Ireland.
- TREVOR, Claire (actress); New York City, Mar. 8, 1909.
- TRIPPI, Charley (football player); Pitts-  
ton, Pa., Dec. 14, 1922.
- TRUEX, Ernest (actor); Kansas City, Mo.,  
Sept. 19, 1890.
- TRUJILLO y MOLINA, Rafael (Dom. Rep.  
statesman); San Cristóbal, Oct. 24, 1891.
- TRUMAN, Harry S. (U. S. statesman); La-  
mar, Mo., May 8, 1884.
- TRUMAN, Margaret (soprano); Independ-  
ence, Mo., Feb. 17, 1924.
- TUCKER, Richard (tenor); New York City,  
Aug. 28, 1914.
- TUCKER, Sophie (Sophie Abuza) (enter-  
tainer); Russia, 1884.
- TUDOR, Anthony (choreographer); Lon-  
don, Eng., Apr. 4, 1909.
- TUNNEY, Gene (James J.) (boxer); New  
York City, May 25, 1898.
- TURNER, Lana (Julia Jean Turner) (ac-  
tress); Wallace, Idaho, Feb. 8, 1920.
- TURNESA, Willie (golfer); Elmsford, N. Y.,  
Jan. 29, 1914.
- UTERMEYER, Louis (poet & antholo-  
gist); New York City, Oct. 1, 1885.
- UREY, Harold C. (chemist); Walkerton,  
Ind., Apr. 29, 1893.
- USTINOV, Peter (dramatist & actor);  
London, Eng., 1921.
- UTRILLO, Maurice (painter); Paris, Fr.,  
Dec. 25, 1883.
- VALLEE, Rudy (Hubert) (actor & band  
leader); Island Pond, Vt., July 28, 1901.
- VANDERBILT, Alfred G. (horse racing ex-  
ecutive); London, Eng., Sept. 22, 1912.
- VAN DOREN, Mark (poet & critic); Hope,  
Ill., June 13, 1894.
- VAN DRUTEN, John (dramatist); London,  
Eng., June 1, 1901.
- VAUGHAN-WILLIAMS, Ralph (composer);  
Down Ampney, Eng., Oct. 12, 1872.
- VENUTA, Benay (singer); San Francisco,  
Calif., Jan. 27, 1912.
- VERA-ELLEN (Vera-Ellen Rohe) (actress);  
Cincinnati, Ohio, Feb. 16.
- VIDOR, King (movie director & producer);  
Galveston, Tex., Feb. 8, 1895.
- VIERECK, Peter (poet); New York City,  
Aug. 5, 1916.
- VILLA-LOBOS, Heitor (composer); Rio de  
Janeiro, Braz., Mar. 5, 1884.
- VINES, H. Ellsworth, Jr. (tennis & golf  
player); Los Angeles, Calif., Sept. 28,  
1911.
- VINSON, Frederick M. (U. S. jurist);  
Louisia, Ky., Jan. 22, 1890.
- VISHINSKY, Andrei Y. (Soviet states-  
man); Odessa, Rus., 1883.
- VLAMINCK, Maurice de (painter); Paris,  
Fr., Apr. 4, 1876.
- VON STROHEIM, Erich (movie director &  
actor); Vienna, Aus., Sept. 22, 1885.
- WAGNER, Hans (John P.) (baseball  
player); Mansfield, Pa., Feb. 24, 1874.
- WAGNER, Robert (actor); Detroit, Mich.,  
Feb. 10, 1930.
- WAGNER, Robert F. (Mayor of NYC);  
New York City, Apr. 20, 1910.
- WALCOTT, Jersey Joe (Arnold Cream)  
(boxer); Merchantville, N. J., Jan. 31,  
1914.
- WALKER, Mickey (boxer); Elizabeth, N. J.,  
July 13, 1901.
- WALKER, Nancy (Ann Myrtle Swoyer)  
(actress); Philadelphia, Pa.
- WALLACE, DeWitt (publisher); St. Paul,  
Minn., Nov. 12, 1889.
- WALLACE, Henry A. (U. S. statesman);  
Adair Co., Iowa, Oct. 7, 1888.
- WALLENSTEIN, Alfred (orchestra con-  
ductor); Chicago, Ill., Oct. 7, 1898.
- WALTARI, Mika (novelist); Helsinki, Fin.,  
Sept. 19, 1908.
- WALTER, Bruno (Bruno Walter Schle-  
singer) (orchestra conductor); Berlin,  
Ger., Sept. 17, 1876.
- WALTON, William (composer); Oldham,  
Eng., Mar. 29, 1902.
- WARD, Bud (Marvin H.) (golfer); Olym-  
pia, Wash., May 1, 1913.
- WARING, Fred (band leader); Tyrone,  
Pa., June 9, 1900.

- WARNER, Sylvia Townsend (novelist & poet); Harrow-on-the-Hill, Eng., 1893.
- WARREN, Earl (U. S. jurist); Los Angeles, Calif., Mar. 19, 1891.
- WARREN, Leonard (baritone); New York City, Apr. 21, 1911.
- WARREN, Robert Penn (novelist); Guthrie, Ky., Apr. 24, 1905.
- WATERS, Ethel (actress & singer); Chester, Pa., Oct. 31, 1900.
- WATSON, Thomas J. (industrialist); Campbell, N. Y., Feb. 17, 1874.
- WAUGH, Alexander (novelist); London, Eng., July 8, 1898.
- WAUGH, Evelyn (novelist); London, 1903.
- WAYNE, David (actor); Traverse City, Mich., Jan. 30, 1914.
- WAYNE, John (Marion Michael Morrison) (actor); Winterset, Iowa, May 26, 1907.
- WEBB, Clifton (actor); Indiana, 1891.
- WEBB, Jack (actor); Santa Monica, Calif., Apr. 2, 1920.
- WEBSTER, Margaret (actress & director); New York City, Mar. 15, 1905.
- WEIDMAN, Charles (dancer); New York City, July 22, 1901.
- WEIR, Ernest T. (industrialist); Pittsburgh, Pa., Aug. 1, 1875.
- WEISSMULLER, Johnny (swimmer & actor); Chicago, Ill.
- WELLES, Orson (actor & director); Kenosha, Wis., May 6, 1915.
- WELTY, Eudora (novelist); Jackson, Miss., Apr. 13, 1909.
- WESCOTT, Glenway (novelist); Kewaskum, Wis., Apr. 11, 1901.
- WEST, Mae (actress); Brooklyn, N. Y., Aug. 17, 1892.
- WEST, Rebecca (Cicely Fairfield) (novelist); Edinburgh, Scot., Dec. 25, 1892.
- WHITE, Ben (harness racer); Whiteville, Ont., Can., Feb. 5, 1873.
- WHITEMAN, Paul (band leader); Denver, Colo., 1891.
- WHITNEY, C. V. (horse racing executive); New York City, Feb. 20, 1899.
- WHORF, Richard (actor); Winthrop, Mass.
- WIDENER, George D. (horse racing executive); Philadelphia, Pa., Mar. 11, 1889.
- WIDMARK, Richard (actor); Sunrise, Minn., Dec. 26, 1914.
- WILDE, Cornel (actor); New York City, Oct. 13, 1915.
- WILDER, Billy (movie director); Vienna, Aus., June 22, 1906.
- WILDER, Thornton (novelist); Madison, Wis., Apr. 17, 1897.
- WILDING, Michael (actor); Westcliff, Essex, Eng., July 23, 1912.
- WILLARD, Jess (boxer); Pottawatomie Co., Kans., Dec. 29, 1883.
- WILLIAMS, Emlyn (dramatist); Mostyn, Wales, Nov. 26, 1905.
- WILLIAMS, Esther (swimmer); Los Angeles, Calif.
- WILLIAMS, Gluyas (cartoonist); San Francisco, Calif., July 23, 1888.
- WILLIAMS, Ted (baseball player); San Diego, Calif., Oct. 30, 1918.
- WILLIAMS, Tennessee (Thomas L.) (dramatist); Columbus, Miss., Mar. 26, 1914.
- WILLIAMS, William Carlos (poet); Rutherford, N. J., Sept. 17, 1883.
- WILSON, Charles Edward (industrialist, GE); New York City, Nov. 18, 1886.
- WILSON, Edmund (literary critic); Red Bank, N. J., May 8, 1895.
- WILSON, Margaret (novelist); Traer, Iowa, Jan. 16, 1882.
- WILSON, Marie (actress); Anaheim, Calif., Aug. 19, 1916.
- WINCHELL, Paul (ventriloquist); New York City, Dec. 21, 1923.
- WINCHELL, Walter (columnist); New York City, Apr. 7, 1897.
- WINNINGER, Charles (actor); Athens, Wis., May 26, 1884.
- WINTERS, Shelley (Shirley Schrifft) (actress); East St. Louis, Ill., Aug. 18, 1923.
- WOOD, Peggy (actress); Brooklyn, N. Y., Feb. 9, 1892.
- WOOLLEY, Monte (Edgar) (actor); New York City, Aug. 17, 1888.
- WORTMAN, Denys (cartoonist); Saugerties, N. Y., May 1, 1887.
- WOUK, Herman (novelist); New York City, May 27, 1915.
- WRIGHT, Frank Lloyd (architect); Richland Center, Wis., June 8, 1869.
- WRIGHT, Richard (novelist); nr. Natchez, Miss., Sept. 4, 1908.
- WRIGHT, Teresa (actress); New York City, Oct. 27, 1918.
- WYATT, Jane (actress); Campgaw, N. J., Aug. 12, 1912.
- WYETH, Andrew (painter); Chadds Ford, Pa., July 12, 1917.
- WYLER, William (movie director); Mulhouse, Fr., July 1, 1902.
- WYLIE, Philip (novelist); Beverly, Mass., May 12, 1902.
- WYMAN, Jane (Sarah Fulks) (actress); St. Joseph, Mo., Jan. 4, 1914.



WYNN, Ed (Edwin Leopold) (comedian); Philadelphia, Pa., Nov. 9, 1886.

WYNN, Keenan (actor); New York City, July 27, 1916.

YERBY, Frank (novelist); Augusta, Ga., Sept. 5, 1916.

YOSHIDA, Shigeru (Japanese statesman); Tokyo, Jap., Sept. 22, 1878.

YOUNG, Alan (Angus Young) (actor); No. Shields, Northum., Eng., Nov. 19, 1919.

YOUNG, Cy (Denton T.) (baseball player); Gilmore, Ohio, Mar. 29, 1867.

YOUNG, Loretta (Gretchen) (actress); Salt Lake City, Utah, Jan. 6, 1913.

YOUNG, Robert (actor); Chicago, Ill., Feb. 22, 1907.

YURKA, Blanche (actress); St. Paul, Minn., June 19, 1893.

ZAHARIAS, Babe (Mildred Didrikson) (athlete); Port Arthur, Tex., June 26, 1913.

ZAHEDI, Fazollah (Iranian statesman); Iran, 1897.

ZANUCK, Darryl F. (movie director); Wahoo, Nebr., Sept. 5, 1902.

ZIMBALIST, Efrem (violinist); Rostov-on-Don, Rus., Apr. 9, 1889.

ZORACH, William (sculptor); Eurburg, Lith., Feb. 28, 1887.

ZUKOR, Adolph (movie producer); Ricse, Hung., Jan. 7, 1873.

ZWEIG, Arnold (novelist); Grosz-Glogau, Silesia, Nov. 10, 1887.

## Who's Who in U. S. Government

ADAMS, Sherman (Pres. aide); East Dover, Vt., Jan. 8, 1899.

AIKEN, George D. (U. S. Senator); Dummerston, Vt., Aug. 20, 1892.

ALDRICH, Winthrop W. (Amb. to Brit.); Providence, R. I., Nov. 2, 1885.

ALLEN, Leo E. (U. S. Representative); Elizabeth, Ill., Oct. 5, 1898.

ANDERSON, Clinton P. (U. S. Senator); Centerville, S. Dak., Oct. 23, 1895.

ANDERSON, Robert B. (Sec. of Navy); nr. Burleson, Tex., June 4, 1910.

BENSON, Ezra Taft (Sec. of Agr.); Whitney, Idaho, Aug. 4, 1899.

BOHLEN, Charles E. (Amb. to Rus.); Clayton, N. Y., Aug. 30, 1904.

BRICKER, John W. (U. S. Senator); Madison Co., Ohio, Sept. 6, 1893.

BRIDGES, Styles (U. S. Senator); West Pembroke, Maine, Sept. 9, 1898.

BROWNELL, Herbert, Jr. (Att. Gen.); Peru, Nebr., Feb. 20, 1904.

BURNS, Arthur F. (Econ. Adv. to Pres.); Stanislau, Austria, Apr. 27, 1904.

BYRD, Harry F. (U. S. Senator); Martinsburg, W. Va., June 10, 1887.

CAPEHART, Homer E. (U. S. Senator); Algiers, Ind., June 6, 1897.

CARLSON, Frank (U. S. Senator); nr. Concordia, Kans., Jan. 23, 1893.

CARNEY, Adm. Robert B. (Ch. Nav. Op.); Vallejo, Calif., Mar. 26, 1895.

CASE, Francis H. (U. S. Senator); Everly, Iowa, Dec. 9, 1896.

CHIFFERFIELD, Robert B. (U. S. Representative); Canton, Ill., Nov. 20, 1899.

COLE, W. Sterling (U. S. Representative); Painted Post, N. Y., Apr. 18, 1904.

CONANT, James B. (U. S. High Comm., Ger.); Dorchester, Mass., Mar. 26, 1893.

DILLON, C. Douglas (Amb. to Fr.); Geneva, Switz., Aug. 21, 1909.

DIRKSEN, Everett M. (U. S. Senator); Springfield, Ill., Oct. 27, 1912.

DODGE, Joseph M. (Dir. of Budg.); Detroit, Mich., Nov. 18, 1890.

DOUGLAS, Paul H. (U. S. Senator); Salem, Mass., Mar. 26, 1892.

DUFF, James H. (U. S. Senator); Carnegie, Pa., Jan. 2, 1883.

DULLES, Allen W. (Dir. CIA); Watertown, N. Y., Apr. 7, 1893.

DULLES, John Foster (Sec. of State); Washington, D. C., Feb. 25, 1888.

DWORSHAK, Henry C. (U. S. Senator); Duluth, Minn., Aug. 29, 1894.

EISENHOWER, Dwight D. (President); Denison, Tex., Oct. 14, 1890.

FECHTELER, Adm. William M. (NATO Comm. in Chf., South); San Rafael, Calif., Mar. 6, 1896.

FERGUSON, Homer (U. S. Senator); Harrison City, Pa., Feb. 25, 1889.

FLANDERS, Ralph E. (U. S. Senator); Barnet, Vt., Sept. 28, 1880.

FULBRIGHT, J. William (U. S. Senator); Sumner, Mo., Apr. 9, 1905.

GREEN, Theodore F. (U. S. Senator); Providence, R. I., Oct. 2, 1867.

GRUENTHER, Gen. Alfred M. (Sup. All. Comm., Eur.); Platte Center, Nebr., Mar. 3, 1899.

HAGERTY, James C. (Press Sec. to Pres.); Plattsburg, N. Y., May 9, 1909.

HALLECK, Charles A. (U. S. Representative); De Motte, Ind., Aug. 22, 1900.

HILL, Lister (U. S. Senator); Montgomery, Ala., Dec. 29, 1894.

- HOBBY**, Oveta Culp (Sec. of Welf.); Killen, Tex., Jan. 19, 1905.
- HOFFMAN**, Clare E. (U. S. Representative); Vicksburg, Pa., Sept. 10, 1875.
- HOOVER**, Herbert, Jr. (Under Sec. State); London, Eng., Aug. 4, 1903.
- HOOVER**, J. Edgar (Dir. FBI); Washington, D. C., Jan. 1, 1895.
- HUMPHREY**, George M. (Sec. of Treas.); Cheboygan, Mich., Mar. 8, 1890.
- HUMPHREY**, Hubert H., Jr. (U. S. Senator); Wallace, S. Dak., May 27, 1911.
- IVES**, Irving M. (U. S. Senator); Bainbridge, N. Y., Jan. 24, 1896.
- JACKSON**, Henry M. (U. S. Senator); Everett, Wash., May 31, 1912.
- JENNER**, William E. (U. S. Senator); Marengo, Ind., July 21, 1908.
- JOHNSON**, Lyndon B. (U. S. Senator); nr. Stonewall, Tex., Aug. 27, 1908.
- KEFAUVER**, Estes (U. S. Senator); nr. Madisonville, Tenn., July 26, 1903.
- KENNEDY**, John F. (U. S. Senator); Brookline, Mass., May 29, 1917.
- KERR**, Robert S. (U. S. Senator); Ada, Okla., Sept. 11, 1896.
- KILGORE**, Harley M. (U. S. Senator); Brown, W. Va., Jan. 11, 1893.
- KNOWLAND**, William F. (U. S. Senator); Alameda, Calif., June 26, 1908.
- LANGER**, William (U. S. Senator); Everest, N. Dak., Sept. 30, 1886.
- LEHMAN**, Herbert H. (U. S. Senator); New York City, Mar. 28, 1878.
- LODGE**, Henry Cabot, Jr. (U. N. Del.); Nahant, Mass., July 5, 1902.
- LONG**, Russell B. (U. S. Senator); Shreveport, La., Nov. 3, 1918.
- LUCE**, Clare Boothe (Amb. to It.); New York City, Apr. 10, 1903.
- MCCARTHY**, Joseph R. (U. S. Senator); Grand Chute, Wis., Nov. 14, 1909.
- MCCLELLAN**, John L. (U. S. Senator); Sheridan, Ark., Feb. 25, 1896.
- MCCONNELL**, Samuel K. (U. S. Representative); Eddystone, Pa., Apr. 6, 1901.
- McKAY**, Douglas (Sec. of Int.); Portland, Oreg., June 24, 1893.
- MARTIN**, Edward (U. S. Senator); Washington Township, Pa., Sept. 18, 1879.
- MARTIN**, Joseph W., Jr. (U. S. Representative); No. Attleboro, Mass., Nov. 3, 1884.
- MILLIKIN**, Eugene D. (U. S. Senator); Hamilton, Ohio, Feb. 12, 1891.
- MITCHELL**, James P. (Sec. of Labor); Elizabeth, N. J., Nov. 12, 1902.
- MONRONEY**, A. S. Mike (U. S. Senator); Oklahoma City, Okla., Mar. 2, 1902.
- MORSE**, Wayne L. (U. S. Senator); Madison, Wis., Oct. 20, 1900.
- MUNDT**, Karl E. (U. S. Senator); Humboldt, S. Dak., June 3, 1900.
- NIXON**, Richard M. (Vice President); Yorba Linda, Calif., Jan. 9, 1913.
- RADFORD**, Adm. Arthur W. (Chmn. Jt. Chs. Staff); Chicago, Ill., Feb. 27, 1896.
- RAYBURN**, Sam (U. S. Representative); Roane Co., Tenn., Jan. 6, 1882.
- REED**, Daniel A. (U. S. Representative); Sheridan, N. Y., Sept. 15, 1877.
- RIDGWAY**, Gen. Matthew B. (Army Ch. Staff); Ft. Monroe, Va., Mar. 3, 1895.
- ROCKEFELLER**, Nelson A. (Undersec. of Welf.); Bar Harbor, Maine, July 8, 1908.
- RUSSELL**, Richard B. (U. S. Senator); Winder, Ga., Nov. 2, 1897.
- SALTONSTALL**, Leverett (U. S. Senator); Chestnut Hill, Mass., Sept. 1, 1892.
- SHORT**, Dewey (U. S. Representative); Galena, Mo., Apr. 7, 1898.
- SMITH**, H. Alexander (U. S. Senator); New York City, Jan. 30, 1880.
- SMITH**, Margaret Chase (U. S. Senator); Skowhegan, Maine, Dec. 14, 1897.
- SPARKMAN**, John (U. S. Senator); Morgan Co., Ala., Dec. 20, 1899.
- STASSEN**, Harold E. (Dir. For. Op. Adm.); West St. Paul, Minn., Apr. 13, 1907.
- STEVENS**, Robert T. (Sec. of Army); Fanwood, N. J., July 31, 1899.
- STRAUSS**, Lewis L. (Chmn. AEC); Charleston, W. Va., Jan. 31, 1896.
- SUMMERFIELD**, Arthur E. (Post. Gen.); Pinconning, Mich., Mar. 17, 1899.
- SYMINGTON**, Stuart (U. S. Senator); Amherst, Mass., June 26, 1901.
- TABER**, John (U. S. Representative); Auburn, N. Y., May 5, 1880.
- TALBOTT**, Harold E. (Sec. of AF); Dayton, Ohio, Mar. 31, 1888.
- TWINING**, Gen. Nathan F. (AF Ch. Staff); Monroe, Wis., Oct. 11, 1897.
- VELDE**, Harold H. (U. S. Representative); Parkland, Ill., Apr. 1, 1910.
- WEEKS**, Sinclair (Sec. of Comm.); West Newton, Mass., June 15, 1893.
- WILEY**, Alexander (U. S. Senator); Chipewa Falls, Wis., May 26, 1884.
- WILSON**, Charles Erwin (Sec. of Def.); Minerva, Ohio, July 18, 1890.
- WOLCOTT**, Jesse P. (U. S. Representative); Gardner, Mass., Mar. 8, 1893.

# ★ WHO WAS WHO ★

*Prepared by*

**A. N. MARQUIS CO., Publishers of WHO'S WHO IN AMERICA**

For Presidents of the United States and Rulers of England, France, Germany and Russia, consult the index.

In many instances below, the original name or form of the name is shown in parentheses.

- ADAMS, Charles Francis (1807-1886), American diplomat.
- ADAMS, Henry Brooks (1838-1918), American historian.
- ADAMS, James Truslow (1878-1949), American historian.
- ADAMS, Maude (Maude Kiskadden) (1872-1953), American actress.
- ADAMS, Samuel (1722-1803), American revolutionary patriot.
- ADDAMS, Jane (1860-1935), American social worker.
- ADE, George (1866-1944), American humorist.
- ADLER, Alfred (1870-1937), Austrian psychologist.
- AESCHYLUS (525-456 B.C.), Greek dramatist.
- AESOP (c.600 B.C.), Greek fabulist.
- ALCOTT, Louisa May (1832-1888), American author.
- ALDEN, John (1599?-1687), American Pilgrim.
- ALEXANDER the Great (356-323 B.C.), Macedonian conqueror.
- ALGER, Horatio (1834-1899), American author.
- ALLEN, Ethan (1739-1789), American revolutionary soldier.
- AMPÈRE, André Marie (1775-1836), French physicist.
- ANDERSEN, Hans Christian (1805-1875), Danish author.
- ANDERSON, John Murray (d. 1954), American stage director (born Newfoundland).
- ANDERSON, Sherwood (1876-1941), American author.
- ANDREYEV, Leonid Nikolaevich (1871-1919), Russian author.
- ANTHONY, Mark (Marcus Antonius) (83?-30 B.C.), Roman statesman.
- ANTHONY, Susan Brownell (1820-1906), American woman suffragist.
- AQUINAS, St. Thomas (1225?-1274), Italian philosopher.
- ARCHIMEDES (287?-212 B.C.), Greek mathematician.
- ARISTOPHANES (448?-380 B.C.), Greek dramatist.
- ARISTOTLE (384-322 B.C.), Greek philosopher.
- ARLISS, George (1868-1946), English actor.
- ARMSTRONG, Edwin Howard (1890-1954), American inventor.
- ARNOLD, Benedict (1741-1801), American traitor.
- ARNOLD, Matthew (1822-1888), English poet & critic.
- ASTOR, John Jacob (1763-1848), American financier (born Germany).
- ATHERTON, Gertrude Franklin (nee Horn) (1857-1948), American novelist.
- AUDUBON, John James (1786-1851), American ornithologist & artist (born Haiti).
- AUER, Leopold (1845-1930), Hungarian violinist.
- AUGUSTINE, Saint (Aurelius Augustinus) (354-430), Early Christian philosopher.
- AUGUSTUS (Gaius Octavius) (63 B.C.-A.D. 14), Roman emperor.
- AUSTEN, Jane (1775-1817), English novelist.
- BACH, Johann Sebastian (1685-1750), German composer.
- BACON, Francis (1561-1626), English philosopher.
- BAEDEKER, Karl (1801-1859), German travel-guidebook publisher.
- BALBOA, Vasco Núñez de (1475-1517), Spanish explorer.
- BALDWIN, Stanley (1867-1947), British statesman.
- BALZAC, Honoré de (1799-1850), French novelist.
- BARNUM, Phineas Taylor (1810-1891), American showman.
- BARRIE, Sir James Matthew (1860-1937), Scottish novelist & dramatist.



- BARRY, Philip (1896-1949), American dramatist.
- BARRYMORE, John (1882-1942), American actor.
- BARTÓK, Béla (1881-1945), Hungarian composer.
- BARTON, Clara (Clarissa Harlowe Barton) (1821-1912), Founder of American Red Cross.
- BAUDELAIRE, Pierre Charles (1821-1867), French poet.
- BEARD, Charles Austin (1874-1948), American historian.
- BECKET, Thomas (or Thomas à Becket) (1118?-1170), English churchman.
- BEDE, Saint (called "The Venerable Bede") (673-735), English scholar.
- BEECHER, Henry Ward (1813-1887), American clergyman.
- BEERY, Wallace (1886-1949), American actor.
- BEETHOVEN, Ludwig van (1770-1827), German composer (Flemish descent).
- BELASCO, David (1854-1931), American dramatist & producer.
- BELL, Alexander Graham (1847-1922), American inventor (born Scotland).
- BELLAMY, Edward (1850-1898), American author.
- BELLOC, Hilaire (Joseph Hilary Pierre Belloc) (1870-1953), English author (born France).
- BELLOWS, George Wesley (1882-1925), American painter & lithographer.
- BENCHLEY, Robert Charles (1889-1945), American humorist.
- BENEŠ, Eduard (1884-1948), Czech statesman.
- BENÉT, Stephen Vincent (1898-1943), American poet & story writer.
- BENÉT, William Rose (1886-1950), American poet & novelist.
- BENJAMIN, Judah Philip (1811-1884), Confederate statesman.
- BENNETT, Enoch Arnold (1867-1931), English novelist & dramatist.
- BENNETT, James Gordon (1795-1872), American editor (born Scotland).
- BERLIOZ, Louis Hector (1803-1869), French composer.
- BERNADETTE of Lourdes (Bernadette Soubirous) (1844-1879), French saint.
- BERNHARDT, Sarah (Rosine Bernard) (1844-1923), French actress.
- BEVIN, Ernest (1884-1951), British statesman.
- BIERCE, Ambrose Gwinnett (1842-?1914), American journalist.
- BISMARCK-SCHÖNHAUSEN, Prince Otto Eduard Leopold von (1815-1898), German statesman.
- BIZET, Georges (Alexandre César Léopold Bizet) (1838-1875), French composer.
- BLACKSTONE, Sir William (1723-1780), English jurist.
- BLAINE, James Gillespie (1830-1893), American statesman.
- BLAKE, William (1757-1827), English poet & artist.
- BLASCO-IBÁÑEZ, Vicente (1867-1928), Spanish novelist.
- BLUM, Léon (1872-1950), French statesman.
- BOCCACCIO, Giovanni (1313-1375), Italian author (born France).
- BOLÍVAR, Simón (1783-1830), South American liberator (born Venezuela).
- BOND, Carrie (nee Jacobs) (1862-1946), American song composer.
- BOONE, Daniel (1734-1820), American frontiersman.
- BOOTH, Edwin Thomas (1833-1893), American actor.
- BOOTH, "General" Evangeline Cory (1865-1950), English religious leader.
- BOOTH, John Wilkes (1838-1865), American actor & assassin of Lincoln.
- BORGIA, Cesare (1475?-1507), Italian nobleman.
- BORGIA, Lucrezia (1480-1519), Italian noblewoman & duchess of Ferrara.
- BORODIN, Alexander Porfirevich (1834-1887), Russian composer.
- BOSWELL, James (1740-1795), Scottish biographer & diarist.
- BOTTICELLI, Sandro (Alessandro di Mariano dei Filipepi) (1444?-1510), Italian painter.
- BOWIE, James (1799-1836), American soldier.
- BRAHMS, Johannes (1833-1897), German composer.
- BRAILLE, Louis (1809-1852), French teacher of blind.
- BRANDEIS, Louis Dembitz (1856-1941), American jurist.
- BRICE, Fanny (Fannie Borach) (1892-1951), American comedienne.
- BRISBANE, Arthur (1864-1936), American journalist.
- BRONTË, Charlotte (1816-1855), English novelist.
- BRONTË, Emily Jane (1818-1848), English novelist.
- BROOKE, Rupert (1887-1915), English poet.
- BROUN, Matthew Heywood Campbell (1888-1939), American journalist.
- BROWN, John (1800-1859), American abolitionist.

- BROWNING, Elizabeth Barrett** (nee Elizabeth Moulton\*) (1806-1861), English poet.
- BROWNING, Robert** (1812-1889), English poet.
- BRUGHEL, Pieter** (1520?-1569), Flemish painter.
- BRUTUS, Marcus Junius** (85?-42 B.C.), Roman politician.
- BRYAN, William Jennings** (1860-1925), American politician.
- BRYANT, William Cullen** (1794-1878), American poet & editor.
- BUDDHA.** See Gautama Buddha.
- BUFFALO BILL** (William Frederick Cody) (1846-1917), American scout.
- BUNYAN, John** (1628-1688), English preacher & author.
- BURBANK, Luther** (1849-1926), American horticulturist.
- BURKE, Edmund** (1729-1797), British statesman (born Ireland).
- BURNS, Robert** (1759-1796), Scottish poet.
- BURR, Aaron** (1756-1836), American statesman.
- BURROUGHS, John** (1837-1921), American naturalist.
- BUTLER, Nicholas Murray** (1862-1947), American educator.
- BUTLER, Samuel** (1835-1902), English satirist.
- BYRON, George Gordon** (6th Baron Byron) (1788-1824), English poet.
- CABOT, John** (Giovanni Caboto) (1450-1498), Italian navigator.
- CABOT, Sebastian** (1476?-1557), English navigator (born Italy).
- CAESAR, Gaius Julius** (100-44 B.C.), Roman statesman.
- CALHOUN, John Caldwell** (1782-1850), American statesman.
- CALVIN, John** (Jean Chauvin) (1509-1564), French religious reformer.
- CAPONE, Al** (Alphonse) (1899-1947), American gangster (born Italy).
- CARDOZO, Benjamin Nathan** (1870-1938), American jurist.
- CARLYLE, Thomas** (1795-1881), Scottish essayist & historian.
- CARNEGIE, Andrew** (1835-1919), American industrialist (born Scotland).
- CARROLL, Lewis** (Charles Lutwidge Dodgson) (1832-1898), English author & mathematician.
- CARSON, Kit** (Christopher) (1809-1868), American scout.
- CARUSO, Enrico** (Errico) (1873-1921), Italian tenor.
- CARVER, George Washington** (1864-1943), American botanist.
- CASANOVA DE SEINGALT, Giovanni Jacopo** (1725-1798), Italian adventurer.
- CATHER, Willa Sibert** (1876-1947), American novelist.
- CATT, Carrie Chapman** (nee Lane) (1859-1947), American woman-suffragist.
- CELLINI, Benvenuto** (1500-1571), Italian goldsmith & sculptor.
- CERVANTES SAAVEDRA, Miguel de** (1547-1616), Spanish novelist.
- CÉZANNE, Paul** (1839-1906), French painter.
- CHALIAPIN, Feodor Ivanovitch** (1873-1938), Russian basso.
- CHAMBERLAIN, Arthur Neville** (1869-1940), British statesman.
- CHAMPLAIN, Samuel de** (1567?-1635), French explorer.
- CHANEY, Lon** (1883-1930), American actor.
- CHARLEMAGNE** (742-814), Holy Roman Emperor.
- CHATTERTON, Thomas** (1752-1770), English poet.
- CHAUCER, Geoffrey** (1340?-1400), English poet.
- CHEKHOV, Anton Pavlovich** (1860-1904), Russian dramatist & story writer.
- CHESTERTON, Gilbert Keith** (1874-1936), English author.
- CHIPPENDALE, Thomas** (1718?-1779), English cabinetmaker.
- CHOPIN, Frédéric François** (1810-1849), French composer (born Poland).
- CHRISTIANS, Mady** (Marguerita) (1900-1951); American actress (born Austria).
- CICERO, Marcus Tullius** (106-43 B.C.), Roman orator & statesman.
- CLARK, George Rogers** (1752-1818), American Revolutionary leader.
- CLARK, William** (1770-1838), American explorer.
- CLAY, Henry** (1777-1852), American statesman.
- CLEMENCEAU, Georges** (1841-1929), French statesman.
- CLEMENS, S. L.** See Twain.
- CLEOPATRA**, (69-30 B.C.), Egyptian queen.
- COBB, Irvin Shrewsbury** (1876-1944), American humorist.
- CODY, W. F.** See Buffalo Bill.
- COHAN, George Michael** (1878-1942), American actor & dramatist.
- COLERIDGE, Samuel Taylor** (1772-1834), English poet.
- COLLETTE** (Sidonie-Gabriele Colette) (c.1873-1954), French novelist.
- COLUMBUS, Christopher** (Cristoforo Colombo) (1451-1506), Italian navigator.

\* Family name changed by father to Barrett.

- COMPTON, Karl Taylor (1887-1954), American physicist.
- CONFUCIUS (K'ung Fu-tzū) (c.551-479 B.C.), Chinese philosopher.
- CONGREVE, William (1670-1729), English dramatist.
- CONRAD, Joseph (Teodor Józef Konrad Korzeniowski) (1857-1924), English novelist (born Ukraine).
- COOPER, James Fenimore (1789-1851), American novelist.
- COOPER, Peter (1791-1883), American industrialist & philanthropist.
- COPERNICUS, Nicolaus (Mikolaj Kopernik) (1473-1543), Polish astronomer.
- CORBETT, James J. (1866-1933), American boxer.
- CORDAY, Charlotte (Marie Anne Charlotte Corday d'Armont) (1768-1793), French patriot.
- CORNELLE, Pierre (1606-1684), French dramatist.
- CORONADO, Francisco Vázquez (1510-1554), Spanish explorer.
- COROT, Jean Baptiste Camille (1796-1875), French painter.
- CORREGGIO, Antonio Allegri da (1494-1534), Italian painter.
- CORTÉS (or CORTEZ), Hernando (1485-1547), Spanish explorer; conqueror of Mexico.
- COWL, Jane (Jane Cowles) (1884-1950), American actress.
- COWPER, William (1731-1800), English poet.
- CRANE, Stephen (1871-1900), American novelist & poet.
- CRIPPS, Sir Richard Stafford (1889-1952), British statesman.
- CROCE, Benedetto (1866-1952), Italian philosopher.
- CROCKETT, Davy (David) (1786-1836), American frontiersman.
- CURIE, Marie (Marja Skłodowska) (1867-1934), French physical chemist (born Poland).
- CURIE, Pierre (1859-1906), French chemist.
- CUSTER, George Armstrong (1839-1876), American army officer.
- DAMROSCH, Walter Johannes (1862-1950), American orchestra conductor (born Germany).
- DANA, Charles Anderson (1819-1897), American editor.
- D'ANNUNZIO, Gabriele (1863-1938), Italian soldier & author.
- DANTE (or DURANTE) ALIGHIERI (1265-1321), Italian poet.
- DANTON, Georges Jacques (1759-1794), French revolutionary leader.
- DARWIN, Charles Robert (1809-1882), English naturalist.
- DAUMIER, Honoré (1808-1879), French caricaturist.
- DAVID (died c. 973 B.C.), King of Israel and Judah.
- DAVIDSON, Jo (1883-1952), American sculptor.
- DAVIS, Jefferson (1808-1889), Confederate President.
- DEBS, Eugene Victor (1855-1926), American Socialist leader.
- DEBUSSY, Achille Claude (1862-1918), French composer.
- DEFOE, Daniel (1659?-1731), English novelist.
- DEGAS, Hilaire Germain Edgar (1834-1917), French painter.
- DEMOSTHENES (385?-322 B.C.), Greek orator.
- DESCARTES, René (1596-1650), French philosopher & mathematician.
- DE SOTO, Hernando (1500?-1542), Spanish explorer.
- DEWEY, John (1859-1952), American philosopher & educator.
- DICKENS, Charles John Huffam (1812-1870), English novelist.
- DICKINSON, Emily Elizabeth (1830-1886), American poet.
- DIOGENES (412?-323 B.C.), Greek philosopher.
- DISRAELI, Benjamin (1804-1881), British statesman.
- DODGSON, C. L. See Carroll.
- DOLLEFUS, Engelbert (1892-1934), Austrian statesman.
- DONNE, John (1573-1631), English poet.
- DOSTOEVSKI, Fyodor Mikhailovich (1821-1881), Russian novelist.
- DOUGLAS, Lloyd Cassel (1877-1951), American novelist.
- DOUGLAS, Stephen Arnold (1813-1861), American politician.
- DOYLE, Sir Arthur Conan (1859-1930), English novelist & spiritualist.
- DRAKE, Sir Francis (1545?-1596), English navigator.
- DREISER, Theodore (1871-1945), American novelist.
- DRESSLER, Marie (Marie Koerber) (1873-1934), American actress (born Canada).
- DREYFUS, Alfred (1859-1935), French army officer.
- DRYDEN, John (1631-1700), English poet.
- DUMAS, Alexandre (called Dumas père) (1802-1870), French novelist.
- DU MAURIER, George Louis Palmella Busson (1834-1896), English novelist (born Paris).



- DUNCAN, Isadora (1878-1927), American dancer.
- DUSE, Eleonora (1859-1924), Italian actress.
- DVOŘÁK, Antonín (1841-1904), Czech composer.
- EARHART, Amelia (1898-1937), American aviator.
- EDDY, Mary Morse (nee Baker) (1821-1910), American religious leader.
- EDISON, Thomas Alva (1847-1931), American inventor.
- EDMAN, Irwin (1896-1954), American philosopher.
- EHRlich, Paul (1854-1915), German bacteriologist.
- ELGAR, Sir Edward (1857-1934), English composer.
- ELIOT, George (Mary Ann Evans) (1819-1880), English novelist.
- EMERSON, Ralph Waldo (1803-1882), American philosopher & poet.
- EPICURUS (342?-270 B.C.), Greek philosopher.
- ERASMUS, Desiderius (Gerhard Gerhards) (1466?-1536), Dutch scholar.
- ERICSON, Leif (c. 10th century A.D.), Norse navigator.
- ERSKINE, John (1879-1951), American educator & author.
- EUCLID (c.300 B.C.), Greek mathematician.
- EURIPIDES (c.484-407 B.C.), Greek dramatist.
- FAIRBANKS, Douglas (1883-1939), American actor.
- FALLA, Manuel de (1876-1946), Spanish composer.
- FARADAY, Michael (1791-1867), English physicist.
- FIELD, Eugene (1850-1895), American poet.
- FIELDING, Henry (1707-1754), English novelist.
- FIELDS, W. C. (Claude William Dukenfield) (1880-1946), American comedian.
- FISKE, Minnie Maddern (nee Davey) (1865-1932), American actress.
- FITZGERALD, Francis Scott Key (1896-1940), American novelist.
- FITZSIMMONS, Robert Prometheus (1862-1917), N. Z. boxer (born England).
- FLAUBERT, Gustave (1821-1880), French novelist.
- FOCH, Ferdinand (1851-1929), French army officer.
- FORD, Henry (1863-1947), American industrialist.
- FORRESTAL, James Vincent (1892-1949), American statesman.
- FOSTER, Stephen Collins (1826-1864), American song composer.
- FRANCE, Anatole (Jacques Anatole François Thibault) (1844-1924), French author.
- FRANCK, César Auguste (1822-1890), French composer (born Belgium).
- FRANKLIN, Benjamin (1706-1790), American statesman & scientist.
- FREUD, Sigmund (1856-1939), Austrian founder of psychoanalysis.
- FULTON, Robert (1765-1815), American inventor.
- GAINSBOROUGH, Thomas (1727-1788), English painter.
- GALILEI, Galileo (1564-1642), Italian astronomer & physicist.
- GALSWORTHY, John (1867-1933), English novelist & dramatist.
- GANDHI, Mohandas Karamchand (called Mahatma Gandhi) (1869-1948), Hindu leader.
- GARFIELD, John (Julius Garfinkle) (1913-1952), American actor.
- GARIBALDI, Giuseppe (1807-1882), Italian nationalist leader.
- GARRICK, David (1717-1779), English actor.
- GARRISON, William Lloyd (1805-1879), American abolitionist.
- GASPERI, Alcide de (1881-1954), Italian statesman.
- GAUGUIN, Eugène Henri Paul (1848-1903), French painter.
- GAUTAMA BUDDHA (Prince Siddhartha) (563?-483 B.C.), Indian philosopher.
- GEHRIG, Lou (Henry Louis Gehrig) (1903-1941), American baseball player.
- GENGHIS KHAN (Temujin) (1162-1227), Mongol conqueror.
- GEORGE, Henry (1839-1897), American economist.
- GERONIMO (Goyathlay) (1829-1909), Apache chieftain.
- GERSHWIN, George (1898-1937), American composer.
- GIBBON, Edward (1737-1794), English historian.
- GIBSON, Charles Dana (1867-1944), American illustrator.
- GIDE, André (1869-1951), French author.
- GILBERT, Sir William Schwenck (1836-1911), English dramatist & librettist.
- GIOTTO di Bondone (1276?-1337), Italian painter.
- GLADSTONE, William Ewart (1809-1898), British statesman.
- GLUCK, Christoph Willibald (1714-1787), German composer.

- GOEBBELS, Joseph Paul (1897-1945), German Nazi leader.
- GOERING, Hermann (1893-1946), German Nazi leader.
- GOETHALS, George Washington (1858-1928), American engineer.
- GOETHE, Johann Wolfgang von (1749-1832), German poet.
- GOGH, Vincent van (1853-1890), Dutch painter.
- GOGOL, Nikolai Vasilievich (1809-1852), Russian novelist.
- GOLDSMITH, Oliver (1728-1774), English dramatist & poet (born Ireland).
- GOMPERS, Samuel (1850-1924), American labor leader (born England).
- GOODYEAR, Charles (1800-1860), American inventor.
- GORKI, Maxim (Alexei Maximovich Peshkov) (1868-1936), Russian author.
- GOUNOD, Charles François (1818-1893), French composer.
- GOYA y LUCIENTES, Francisco José de (1746-1828), Spanish painter.
- GRAY, Thomas (1716-1771), English poet.
- GRECO, El (Domenicos Theotocopoulos) (c.1542-1614), Spanish painter (born Crete).
- GREELEY, Horace (1811-1872), American journalist & politician.
- GREEN, William (1873-1952), American labor leader.
- GREY, Zane (1875-1939), American novelist.
- GRIEG, Edvard Hagerup (1843-1907), Norwegian composer.
- GRIFFITH, David Lewelyn Wark (1875-1948), American movie producer.
- GRIMM, Jacob (1785-1863), German mythologist.
- GRIMM, Wilhelm (1786-1859), German mythologist.
- GUTENBERG, Johann (1400?-1468), German printer.
- HALE, Nathan (1755-1776), American revolutionary officer.
- HALS, Frans (1580?-1666), Dutch painter.
- HAMILTON, Alexander (1757?-1804), American statesman.
- HAMSUN, Knut (Knut Pedersen) (1859-1952), Norwegian novelist.
- HANCOCK, John (1737-1793), American statesman.
- HANDEL, George Frederick (Georg Friedrich Händel) (1685-1759), English composer (born Germany).
- HANNIBAL, (247-183 B.C.), Carthaginian general.
- HARDY, Thomas (1840-1928), English novelist.
- HARLOW, Jean (Harlean Carpenter) (1911-1937), American actress.
- HARTE, Bret (Francis Brett Harte) (1836-1902); American author.
- HARVEY, William (1578-1657), English physician.
- HAWTHORNE, Nathaniel (1804-1864), American novelist.
- HAY, John Milton (1838-1905), American statesman.
- HAYDN, Franz Joseph (1732-1809), Austrian composer.
- HEARN, Lafcadio (Patricio Lafcadio Tessima Carlos Hearn) (1850-1904), American-Japanese author (born Ionian Is.).
- HEARST, William Randolph (1863-1951), American journalist.
- HEINE, Heinrich (Harry Heine) (1797-1856), German poet.
- HENRY, O. (William Sydney Porter) (1862-1910), American story writer.
- HENRY, Patrick (1736-1799), American statesman.
- HEPPLEWHITE, George (?-1786), English furniture designer.
- HERBERT, Victor (1859-1924), American composer (born Ireland).
- HERGESHEIMER, Joseph (1880-1954), American novelist.
- HERODOTUS (c.484-425 B.C.), Greek historian.
- HINDENBURG, Paul von (Paul Ludwig Hans Anton von Beneckendorff und von Hindenburg) (1847-1934), German statesman.
- HIPPOCRATES (460?-377 B.C.), Greek physician.
- HITLER, Adolf (Adolf Schicklgruber) (1889-1945), German chancellor.
- HOGARTH, William (1697-1764), English painter & engraver.
- HOLBEIN, Hans (called the Elder) (1465?-1524), German painter.
- HOLBEIN, Hans (called the Younger) (1497?-1543), German painter.
- HOLMES, Oliver Wendell (1809-1894), American author.
- HOLMES, Oliver Wendell (1841-1935), American jurist.
- HOMER (c.850 B.C.?), Greek poet.
- HOMER, Winslow (1836-1910), American painter.
- HOOD, Thomas (1799-1845), English poet.
- HOOTON, Earnest Albert (1887-1954), American anthropologist.
- HORACE (Quintus Horatius Flaccus) (65-8 B.C.), Roman poet.

- HOUDINI, Harry** (Ehrich Weiss) (1874-1926), American magician.
- HOUSMAN, Alfred Edward** (1859-1936), English poet.
- HOUSTON, Samuel** (1793-1863), American political leader.
- HOWARD, Leslie** (1893-1943), English actor.
- HOWE, Elias** (1819-1867), American inventor.
- HOWELLS, William Dean** (1837-1920), American author.
- HUBBARD, Elbert Green** (1856-1915), American author.
- HUDSON, Henry** (?-1611), English navigator.
- HUGHES, Charles Evans** (1862-1948), American jurist.
- HUGO, Victor Marie** (1802-1885), French novelist, dramatist & poet.
- HUNT, Leigh** (James Henry Leigh Hunt) (1784-1859), English essayist & poet.
- HUSTON, Walter** (1884-1950), American actor (born Canada).
- HUXLEY, Thomas Henry** (1825-1895), English biologist.
- IBSEN, Henrik** (1828-1906), Norwegian dramatist.
- ICKES, Harold Le Claire** (1874-1952), American statesman.
- INNESS, George** (1825-1894), American painter.
- IRVING, Washington** (1783-1859), American author.
- JACKSON, Thomas Jonathan** ("Stonewall") (1824-1863), Confederate general.
- JAMES, Henry** (1843-1916), American novelist.
- JAMES, Jesse Woodson** (1847-1882), American outlaw.
- JAMES, William** (1842-1910), American psychologist.
- JAY, John** (1745-1829), American statesman & jurist.
- JEFFERSON, Joseph** (1829-1905), American actor.
- JEFFRIES, James J.** (1875-1953), American boxer.
- JENNER, Edward** (1749-1823), English physician.
- JOAN OF ARC** (Jeanne d'Arc) (1412-1431), French military heroine.
- JOFFRE, Joseph Jacques Césaire** (1852-1931), French general.
- JOHNSON, Jack** (John A.) (1878-1946), American boxer.
- JOHNSON, Samuel** (1709-1784), English lexicographer & critic.
- JOLLIET (or JOLIET), Louis** (1645-1700), Canadian explorer.
- JOLSON, Al** (Asa Yoelson) (1886-1950), American actor & singer (born Russia?).
- JONES, John Paul** (John Paul\*) (1747-1792), American naval officer (born Scotland).
- JONSON, Ben** (Benjamin) (1573?-1637), English poet & dramatist.
- JOYCE, James** (1882-1941), Irish novelist.
- JUÁREZ, Benito Pablo** (1806-1872), Mexican statesman.
- KANT, Immanuel** (1724-1804), German philosopher.
- KEATS, John** (1795-1821), English poet.
- KEMAL ATATÜRK** (Mustafa Kemal) (1881-1938), Turkish statesman.
- KENNY, Elizabeth** (called Sister Kenny) (1886-1952), Australian nurse.
- KERN, Jerome David** (1885-1945), American composer.
- KEY, Francis Scott** (1779-1843), American lawyer.
- KIDD, William** (called Captain Kidd) (1645?-1701), pirate (born Scotland).
- KING, William Lyon Mackenzie** (1874-1950), Canadian statesman.
- KIPLING, Rudyard** (1865-1936), English poet & story writer (born India).
- KIRBY, Rollin** (1875-1952), American cartoonist.
- KITCHENER, Horatio Herbert** (1850-1916), British military officer.
- KNOX, John** (1505-1572), Scottish religious reformer.
- KOSCIUSKO, Thaddeus** (Tadeusz Andrzej Bonawentura Kościuszko) (1746-1817), Polish military officer.
- KOUSSEVITZKY, Serge** (Sergel) Alexandrovitch (1874-1951), American orchestra conductor (born Russia).
- KUBLAI KHAN** (1216-1294), Mongol conqueror.
- LAFAYETTE, Marquis de** (Marie Joseph Paul Yves Roch Gilbert du Motier) (1757-1834), French military officer.
- LA FOLLETTE, Robert Marlon** (1855-1925), American politician.
- LA GUARDIA, Fiorello Henry** (1882-1947), American politician.
- LAMB, Charles** (1775-1834), English essayist.
- LANDIS, Kenesaw Mountain** (1866-1944), American jurist.
- LANGTRY, Lily** (nee Emily Charlotte Le Breton) (1852-1929), English actress.
- LANIER, Sidney** (1842-1881), American poet.
- LAO-TZU (or LAO-TSE)** (Li Erh) (c.604-531 B.C.), Chinese philosopher.

\* Added Jones to his name c. 1773.



- LARDNER, Ring (Ringgold Wilmer Lardner) (1885-1933), American story writer.
- LA SALLE, Sieur de (Robert Caveller) (1643-1687), French explorer.
- LAUDER, Sir Harry (Harry MacLennan) (1870-1950), Scottish singer.
- LAVAL, Pierre (1883-1945), French politician.
- LAVOISIER, Antoine Laurent (1743-1794), French chemist.
- LAWRENCE, David Herbert (1885-1930), English novelist.
- LAWRENCE, Gertrude (Gertrud Klasen) (1900-1952), English actress.
- LAWRENCE OF ARABIA (Thomas Edward Lawrence\*) (1888-1935), British author & soldier.
- LEAR, Edward (1812-1888), English nonsense poet.
- LEE, Robert Edward (1807-1870), American military officer; commander in chief of Confederate armies.
- LEHÁR, Franz (1870-1948), Hungarian composer.
- LENIN, Nikolai (Vladimir Ilich Ulyanov) (1870-1924), Soviet statesman.
- LEONARD, Benny (Benjamin Leiner) (1896-1947), American boxer.
- LEWIS, Meriwether (1774-1809), American explorer.
- LEWIS, Sinclair (1885-1951), American novelist.
- LILIUOKALANI, Lydia Kamekeha (1838-1917), Hawaiian queen.
- LIND, Jenny (Johanna Maria Lind) (1820-1887), Swedish soprano.
- LINDSAY, Nicholas Vachel (1879-1931), American poet.
- LISTER, Joseph (1827-1912), English surgeon.
- LISZT, Franz (1811-1886), Hungarian composer & pianist.
- LIVINGSTONE, David (1813-1873), Scottish missionary & explorer.
- LLOYD GEORGE, David (1863-1945), British statesman.
- LOCKE, John (1632-1704), English philosopher.
- LODGE, Henry Cabot (1850-1924), American legislator.
- LOMBARD, Carole (Carol Jane Peters) (1908-1942), American actress.
- LOMBROSO, Cesare (1836-1909), Italian criminologist.
- LONDON, Jack (1876-1916), American novelist.
- LONG, Huey Pierce (1893-1935), American politician.
- LONGFELLOW, Henry Wadsworth (1807-1882), American poet.
- LOWELL, Amy (1874-1925), American poet.
- LOWELL, James Russell (1819-1891), American poet.
- LOYOLA, St. Ignatius of (Íñigo de Oñez y Loyola) (1491-1556), Spanish founder of Jesuits.
- LUBITSCH, Ernst (1892-1947), American movie director (born Germany).
- LUDENDORFF, Erich Friedrich Wilhelm (1865-1937), German general.
- LUTHER, Martin (1483-1546), German religious reformer.
- MACAULAY, Thomas Babington (1800-1859), English author & statesman.
- MCCORMACK, John (1884-1945), American tenor (born Ireland).
- MCCORMICK, Cyrus Hall (1809-1884), American inventor.
- MACDONALD, James Ramsay (1866-1937), British statesman (born Scotland).
- MACDOWELL, Edward Alexander (1861-1908), American composer.
- MCGRAW, John J. (1875-1934), American baseball manager.
- MACHIAVELLI, Niccolò (1469-1527), Italian political philosopher.
- MACMAHON, Brien (James O'Brien MacMahon) (1903-1952), American legislator.
- MAETERLINCK, Count Maurice (1862-1949), Belgian author.
- MAGELLAN, Ferdinand (Fernando de Magalhães) (1480?-1521), Portuguese navigator.
- MAHAN, Alfred Thayer (1840-1914), American naval historian.
- MANET, Édouard (1832-1883), French painter.
- MANN, Horace (1796-1859), American educator.
- MANSFIELD, Katherine (Kathleen Murry, nee Beauchamp) (1888-1923), British story writer (born New Zealand).
- MANSFIELD, Richard (1854-1907), American actor (born Germany).
- MARAT, Jean Paul (1743-1793), French revolutionist (born Switzerland).
- MARCONI, Guglielmo (1874-1937), Italian inventor.
- MARCUS AURELIUS (Marcus Annus Verus) (121-180), Roman emperor.
- MARIE ANTOINETTE (Josèphe Jeanne Marie Antoinette) (1755-1793), French queen (born Austria).
- MARKHAM, Charles Edwin (1852-1940), American poet.
- MARLOWE, Christopher (1564-1593), English dramatist.
- MARQUETTE, Jacques (1637-1675), French Jesuit missionary & explorer.

\* Changed surname to Shaw in 1927.

- MARSHALL, John** (1755-1835), American jurist.
- MARX, Karl** (1818-1883), German political philosopher.
- MARY STUART** (1542-1587), Queen of Scotland.
- MASARYK, Thomas Garrigue** (1850-1937), Czech statesman.
- MASSENET, Jules Émile Frédéric** (1842-1912), French composer.
- MASTERS, Edgar Lee** (1869-1950), American poet.
- MAUPASSANT, Henri René Albert Guy de** (1850-1893), French story writer.
- MAXIMILIAN** (Ferdinand Maximilian Joseph) (1832-1867), Emperor of Mexico (born Austria).
- MAYO, Charles Horace** (1865-1939), American surgeon.
- MAYO, William James** (1861-1939), American surgeon.
- MEDICI, Lorenzo de'** (called Lorenzo the Magnificent) (1449-1492), Florentine ruler.
- MELBA, Nellie** (Helen Porter Mitchell) (1861-1931), Australian soprano.
- MELLON, Andrew William** (1855-1937), American financier.
- MELVILLE, Herman** (1819-1891), American novelist.
- MENDEL, Gregor Johann** (1822-1884), Austrian botanist.
- MENDELEYEV, Dmitri Ivanovich** (1834-1907), Russian chemist.
- MENDELSSOHN, Felix** (Jakob Ludwig Felix Mendelssohn-Bartholdy) (1809-1847), German composer.
- MESMER, Franz Anton** (1734-1815), Austrian physician.
- METTERNICH, Prince Klemens Wenzel Nepomuk Lothar von** (1773-1859), Austrian statesman.
- MEYERBEER, Giacomo** (Jakob Liebmann Beer) (1791-1864), German composer.
- MICHELANGELO** (Michelangelo Buonarroti) (1475-1564), Italian painter & sculptor.
- MILL, John Stuart** (1806-1873), English philosopher.
- MILLAY, Edna St. Vincent** (1892-1950), American poet.
- MILLER, Glenn** (1909?-1944), American band leader.
- MILLIKAN, Robert Andrews** (1868-1953), American physicist.
- MILTON, John** (1608-1674), English poet.
- MINUIT, Peter** (1580-1638), Dutch colonial officer in America.
- MITCHELL, Margaret** (1900-1949), American novelist.
- MOHAMMED** (570-632), Arabian prophet.
- MOLIERE** (Jean Baptiste Poquelin) (1622-1673), French dramatist.
- MOLNÁR, Ferenc** (1878-1952), Hungarian dramatist.
- MONET, Claude** (1840-1926), French painter.
- MONTAIGNE, Michel Eyquem de** (1533-1592), French essayist.
- MONTEZUMA II** (1480?-1520), Aztec emperor.
- MOONEY, Thomas J. Zechariah** (1885-1942), American labor leader.
- MOORE, George** (1852-1933), Irish novelist.
- MOORE, Thomas** (1770-1852), Irish poet.
- MORE, Sir Thomas** (1478-1535), English statesman & author.
- MORGAN, Helen** (1900?-1941), American singer.
- MORGAN, John Pierpont** (1837-1913), American financier.
- MORSE, Samuel Finley Breese** (1791-1872), American inventor & painter.
- MOUSSORGSKY, Modest Petrovich** (1835-1881), Russian composer.
- MOZART, Wolfgang Amadeus** (Johannes Chrysostomus Wolfgangus Theophilus Mozart) (1756-1791), Austrian composer.
- MURILLO, Bartolomé Esteban** (1617-1682), Spanish painter.
- MURRAY, Philip** (1886-1952), American labor leader (born Scotland).
- MUSSOLINI, Benito** (1883-1945), Italian dictator.
- NAPOLEON BONAPARTE** (1769-1821), Emperor of the French (born Corsica).
- NAST, Thomas** (1840-1902), American cartoonist (born Germany).
- NATION, Carry Amelia** (nee Moore) (1846-1911), American temperance leader.
- NELSON, Horatio** (1758-1805), British naval officer.
- NERO** (Nero Claudius Caesar Drusus Germanicus) (A.D. 37-68), Roman emperor.
- NEWTON, Sir Isaac** (1642-1727), English mathematician & scientist.
- NIETZSCHE, Friedrich Wilhelm** (1844-1900), German philosopher.
- NIGHTINGALE, Florence** (1820-1910), English nurse (born Italy).
- NIJINSKY, Waslaw** (1890-1950), Russian dancer (Polish descent).
- NOBEL, Alfred Bernhard** (1833-1896), Swedish inventor & industrialist.
- NOSTRADAMUS** (Michel de Notredame) (1503-1566), French astrologer.
- OCHS, Adolph Simon** (1858-1935), American newspaper publisher.
- OFFENBACH, Jacques** (1819-1880), French composer (born Germany).

- OMAR KHAYYÁM (died c.1123), Persian poet & astronomer.
- O'NEILL, Eugene Gladstone (1888-1953), American dramatist.
- OROZCO, José Clemente (1883-1949), Mexican painter.
- OSLER, Sir William (1849-1919), Canadian physician.
- OVID (Publius Ovidius Naso) (43 B.C.-?A.D. 17), Roman poet.
- PADEREWSKI, Ignace Jan (1860-1941), Polish pianist & statesman.
- PAGANINI, Nicolò (1782-1840), Italian violinist.
- PAINE, Thomas (1737-1809), American political philosopher (born England).
- PARNELL, Charles Stewart (1846-1891), Irish nationalist leader.
- PASTEUR, Louis (1822-1895), French chemist.
- PATTON, George Smith (1885-1945), American general.
- PAVLOV, Ivan Petrovich (1849-1936), Russian physiologist.
- PAVLOVA, Anna (1885-1931), Russian dancer.
- PEARY, Robert Edwin (1856-1920), American explorer.
- PENN, William (1644-1718), English colonist in America.
- PEPYS, Samuel (1633-1703), English diarist.
- PERICLES (died 429 B.C.), Athenian statesman.
- PERÓN, María Eva Duarte de (1919-1952), Argentine political leader.
- PERSHING, John Joseph (1860-1948), American general.
- PÉTAIN, Henri Philippe (1856-1951), French Marshal.
- PETRARCH (Francesco Petrarca) (1304-1374), Italian poet.
- PHELPS, William Lyon (1865-1943), American critic.
- PIKE, Zebulon Montgomery (1779-1813), American explorer.
- PIRANDELLO, Luigi (1867-1936), Italian dramatist & novelist.
- PITKIN, Walter Boughton (1878-1953), American psychologist & author.
- PITT, William (called "the Younger Pitt") (1759-1806), British statesman.
- PIZARRO, Francisco (1470?-1541), Spanish explorer; conqueror of Peru.
- PLATO (Aristocles) (427?-347 B.C.), Greek philosopher.
- PLUTARCH (A.D. 46?-?120), Greek biographer.
- POCAHONTAS (Matoaka) (1595?-1617), American Indian princess.
- POE, Edgar Allan (1809-1849), American poet & story writer.
- POLO, Marco (1254?-?1324), Italian traveler.
- POMPEY (Gnaeus Pompeius Magnus) (106-48 B.C.), Roman general.
- PONCE DE LEÓN, Juan (1460?-1521), Spanish explorer.
- POPE, Alexander (1688-1744), English poet.
- POST, Wiley (1900-1935), American aviator.
- PROKOFIEFF, Sergei Sergeevich (1891-1953), Russian composer.
- PROUST, Marcel (1871-1922), French novelist.
- PUCCINI, Giacomo (1858-1924), Italian composer.
- PULITZER, Joseph (1847-1911), American newspaper publisher (born Hungary).
- PUSHKIN, Alexander Sergeevich (1799-1837), Russian poet & dramatist.
- PYLE, Ernest Taylor (1900-1945), American journalist.
- RABELAIS, François (1494?-1553), French satirist.
- RACHMANINOFF, Sergei Wassilievitch (1873-1943), Russian pianist & composer.
- RACINE, Jean Baptiste (1639-1699), French dramatist.
- RALEIGH (or RALEGH), Sir Walter (1552?-1618), English courtier & navigator.
- RAPHAEL (Raffaello Santi) (1483-1520), Italian painter.
- RASPUTIN, Grigori Efimovich (1871?-1916), Russian monk.
- RAVEL, Maurice Joseph (1875-1937), French composer.
- REED, Walter (1851-1902), American army surgeon.
- REID, Whitelaw (1837-1912), American journalist & diplomat.
- REINHARDT, Max (Max Goldmann) (1873-1943), Austrian theatrical producer (U. S. citizen, 1940).
- REMBRANDT (Harmensz van Rijn Rembrandt) (1606-1669), Dutch painter.
- RENOIR, Pierre Auguste (1841-1919), French painter.
- RESPIGHI, Ottorino (1879-1936), Italian composer.
- REVERE, Paul (1735-1818), American patriot & silversmith.
- REYNOLDS, Sir Joshua (1723-1792), English painter.
- RHODES, Cecil John (1853-1902), South African statesman (born England).
- RICE, Grantland (1880-1954), American sports writer.



- RICHELIEU**, Duc de (Armand Jean du Plessis) (1585-1642), French cardinal.
- RILEY**, James Whitcomb (1849-1916), American poet.
- RIMSKI-KORSAKOV**, Nikolai Andreevich (1844-1908), Russian composer.
- RIPLEY**, Robert LeRoy (1893-1949), American cartoonist.
- ROBESPIERRE**, Maximilien François Marie Isidore de (1758-1794), French revolutionist.
- ROBINSON**, Bill (Luther) (1878-1949), American dancer.
- ROBINSON**, Edwin Arlington (1869-1935), American poet.
- ROCKEFELLER**, John Davison (1839-1937), American capitalist.
- RODIN**, François Auguste René (1840-1917), French sculptor.
- ROGERS**, Will (William Penn Adair Rogers) (1879-1935), American humorist.
- ROLLAND**, Romain (1866-1944), French author.
- ROMBERG**, Sigmund (1887-1951); American composer (born Hungary).
- ROMMEL**, Erwin (1891-1944), German general.
- ROOT**, Elihu (1845-1937), American statesman.
- ROSSETTI**, Dante Gabriel (1828-1882), English painter & poet.
- ROSSINI**, Gioacchino Antonio (1792-1868), Italian composer.
- ROSTAND**, Edmond (1868-1918), French dramatist & poet.
- ROUSSEAU**, Jean Jacques (1712-1778), French philosopher (born Switzerland).
- RUBENS**, Peter Paul (1577-1640), Flemish painter.
- RUBINSTEIN**, Anton Grigorovich (1829-1894), Russian pianist & composer.
- RUNYON**, Alfred Damon (1880-1946), American journalist & author.
- RUSKIN**, John (1819-1900), English art critic & author.
- RUSSELL**, George William (pseud. *Æ*) (1867-1935), Irish author.
- RUSSELL**, Lillian (Helen Louise Leonard) (1861-1922), American soprano.
- RUTH**, Babe (George Herman Ruth) (1895-1948), American baseball player.
- SAINT-GAUDENS**, Augustus (1848-1907), American sculptor (born Ireland).
- SAINT-SAËNS**, Charles Camille (1835-1921), French composer.
- SAND**, George (Amandine Lucile Aurore Dudevant, nee Dupin) (1803-1876), French novelist.
- SANTAYANA**, George (1863-1952), Spanish philosopher & poet.
- SAPPHO** (c.600 B.C.), Greek poet.
- SARGENT**, John Singer (1856-1925), American painter.
- SARTO**, Andrea del (Andrea Domenico d'Agnolo di Francesco) (1486-1531), Florentine painter.
- SAUL** (11th cent. B.C.), King of Israel.
- SCHILLER**, Johann Christoph Friedrich von (1759-1805), German dramatist.
- SCHNABEL**, Artur (1882-1951), Austrian pianist.
- SCHOPENHAUER**, Arthur (1788-1860), German philosopher.
- SCHUBERT**, Franz Peter (1797-1828), Austrian composer.
- SCHUMANN**, Robert Alexander (1810-1856), German composer.
- SCHUMANN-HEINK**, Ernestine (nee Roessler) (1861-1936), American contralto (born near Prague).
- SCHURZ**, Carl (1829-1906), American army officer & journalist (born Germany).
- SCHWAB**, Charles Michael (1862-1939), American industrialist.
- SCOTT**, Robert Falcon (1868-1912), English antarctic explorer.
- SCOTT**, Sir Walter (1771-1832), Scottish novelist & poet.
- SEWARD**, William Henry (1801-1872), American statesman.
- SHAKESPEARE**, William (1564-1616), English dramatist & poet.
- SHAW**, George Bernard (1856-1950), Irish dramatist & critic.
- SHELLEY**, Percy Bysshe (1792-1822), English poet.
- SHERATON**, Thomas (1751-1806), English furniture designer.
- SHERIDAN**, Richard Brinsley (1751-1816), Irish dramatist.
- SHERMAN**, William Tecumseh (1820-1891), American army officer.
- SKINNER**, Otis (1858-1942), American actor.
- SLOAN**, John (1871-1951), American painter.
- SMETANA**, Bedřich (1824-1884), Czech composer.
- SMITH**, Adam (1723-1790), Scottish economist.
- SMITH**, Alfred Emanuel (1873-1944), American politician.
- SMITH**, John (1579-1631), American colonist (born England).
- SMITH**, Joseph (1805-1844), American religious leader.
- SMUTS**, Jan Christiaan (1870-1950), South African statesman.
- SOCRATES** (c.470-399 B.C.), Greek philosopher.

- SOLOMON (c.973-c.933 B.C.), King of Israel.
- SOLO (638?-759 B.C.), Athenian law-giver.
- SOPHOCLES (496?-406 B.C.), Greek dramatist.
- SOTHERN, Edward Hugh (1859-1933), American actor.
- SPALDING, Albert (1888-1953), American violinist.
- SPENCER, Herbert (1820-1903), English philosopher.
- SPENGLER, Oswald (1880-1936), German philosopher.
- SPENSER, Edmund (1552?-1599), English poet.
- SPINOZA, Baruch (or Benedict) (1632-1677), Dutch philosopher.
- STALIN, Joseph Vissarionovich (Iosif V. Dzhugashvili) (1879-1953), Soviet statesman.
- STANISLAVSKI (Konstantin Sergeevich Alekseev) (1863-1938), Russian stage producer.
- STANLEY, Sir Henry Morton (John Rowlands) (1841-1904), British explorer.
- STEFFENS, Joseph Lincoln (1866-1936), American journalist.
- STEIN, Gertrude (1874-1946), American author.
- STEINMETZ, Charles Proteus (1865-1923), American engineer (born Germany).
- STENDHAL (Marie Henri Beyle) (1783-1842), French novelist.
- STERNE, Laurence (1713-1768), Irish novelist.
- STETTINIUS, Edward Rielley, Jr. (1900-1949), American statesman.
- STEVENSON, Robert Louis Balfour (1850-1894), Scottish novelist & poet.
- STIMSON, Henry Lewis (1867-1950), American statesman.
- STONE, Lucy (1818-1893), American woman suffragist.
- STOWE, Harriet Elizabeth (nee Beecher) (1811-1896), American novelist.
- STRADIVARI, Antonio (1644-1737), Italian violinmaker.
- STRAUS, Oskar (1870-1954), Austrian composer.
- STRAUSS, Johann (1825-1899), Austrian composer.
- STRAUSS, Richard (1864-1949), German composer.
- STUART, Gilbert Charles (1755-1828), American painter.
- STUYVESANT, Peter (1592-1672), Dutch governor of New Amsterdam.
- SULLIVAN, Sir Arthur Seymour (1842-1900), English composer.
- SULLIVAN, John Lawrence (1858-1918), American boxer.
- SUN YAT-SEN (1866-1925), Chinese statesman.
- SWIFT, Jonathan (1667-1745), British satirist.
- SWINBURNE, Algernon Charles (1837-1909), English poet.
- SYNGE, John Millington (1871-1909), Irish dramatist.
- TAFT, Robert Alphonso (1889-1953), American legislator.
- TALLEYRAND-PÉRIGORD, Charles Maurice de (1754-1838), French statesman.
- TAMERLANE (Timur) (1336?-1405), Mongol conqueror.
- TARKINGTON, Newton Booth (1869-1946), American novelist.
- TCHAIKOVSKY (or TSCHAIKOWSKY), Peter (Pëtr) Il'ich (1840-1893), Russian composer.
- TECUMSEH (1768?-1813), Shawnee Indian chief.
- TENNYSON, Alfred (1809-1892), English poet.
- TERRY, Ellen Alicia (1847-1928), English actress.
- TETRAZZINI, Luisa (1874-1940), Italian soprano.
- THACKERAY, William Makepeace (1811-1863), English novelist.
- THOREAU, Henry David (1817-1862), American naturalist & author.
- THORPE, Jim (James Francis Thorpe) (1888-1953), American athlete.
- TIBERIUS (Tiberius Claudius Nero Caesar) (42 B.C.-A.D. 37), Roman emperor.
- TILDEN, William Tatem, II (1893-1953), American tennis player.
- TINTORETTO, IL (Jacopo Robusti) (1518-1594), Italian painter.
- TITIAN (Tiziano Vecelli) (1477-1576), Italian painter.
- TOLSTOI, Count Leo (Lev) Nikolaevich (1828-1910), Russian novelist.
- TOULOUSE-LAUTREC (Henri Marie Raymond de Toulouse-Lautrec Monfa) (1864-1901), French painter.
- TROTSKY, Leon (Leib Davydovich Bronstein) (1877-1940), Russian revolutionary leader.
- TURGENEV, Ivan Sergeevich (1818-1883), Russian novelist.
- TWAIN, Mark (Samuel Langhorne Clemens) (1835-1910), American author.
- TWEED, William Marcy (1823-1878), American politician.
- VALENTINO, Rudolph (Rodolpho d'Antonguolla) (1895-1926), American actor (born Italy).

- VANDENBERG, Arthur Hendrick (1884-1951), American legislator.
- VANDERBILT, Cornelius (1794-1877), American financier.
- VAN DOREN, Carl (1885-1950), American editor & critic.
- VANDYKE (or VAN DYCK), Sir Anthony (1599-1641), Flemish painter.
- VAN GOGH. *See* Gogh.
- VAN LOON, Hendrik Willem (1882-1944), American author (born Netherlands).
- VELÁZQUEZ (or VELÁSQUEZ), Diego Rodríguez de Silva y (1599-1660), Spanish painter.
- VERDI, Giuseppe (1813-1901), Italian composer.
- VERGIL (or VIRGIL) (Publius Vergilius Maro) (70-19 B.C.), Roman poet.
- VERMEER, Jan (or Jan van der Meer van Delft) (1632-1675), Dutch painter.
- VERNE, Jules (1828-1905), French author.
- VILLA, Pancho (or Francisco) (Doroteo Arango) (1877-1923), Mexican bandit.
- VILLON, François (François de Montcorbier) (1431-c.1463), French poet.
- VINCI, Leonardo da (1452-1519), Italian painter, sculptor & scientist.
- VOLTAIRE (François Marie Arouet) (1694-1778), French author.
- WAGNER, Wilhelm Richard (1813-1883), German composer.
- WALKER, James John (1881-1946), American politician.
- WALKER, Robert (1919?-1951), American actor.
- WALTON, Izaak (1593-1683), English author.
- WARD, Fannie (1872-1952), American actress.
- WARFIELD, David (1866-1951), American actor.
- WASHINGTON, Booker T. (1856-1915), American educator.
- WATT, James (1736-1819), Scottish inventor.
- WAYNE, Anthony (1745-1796), American Revolutionary officer, known as "Mad Anthony."
- WEBER, Karl Maria Friedrich Ernst von (1786-1826), German composer.
- WEBSTER, Daniel (1782-1852), American statesman.
- WEBSTER, Noah (1758-1843), American lexicographer.
- WEBSTER, Harold Tucker (1885-1952), American cartoonist.
- WEILL, Kurt (1900-1950), American composer (born Germany).
- WEIZMANN, Chaim (1874-1952), Israeli statesman (born Russia).
- WELLINGTON, Duke of (Arthur Wellesley) (1769-1852), British general & statesman.
- WELLS, Herbert George (1866-1946), English novelist & historian.
- WERFEL, Franz (1890-1945), German novelist & dramatist (born Prague).
- WESLEY, John (1703-1791), English religious leader; founder of Methodism.
- WESTINGHOUSE, George (1846-1914), American inventor.
- WHARTON, Edith Newbold (nee Jones) (1862-1937), American novelist.
- WHISTLER, James Abbott McNeill (1834-1903), American painter & etcher.
- WHITE, William Allen (1868-1944), American journalist.
- WHITMAN, Walt (Walter) (1819-1892), American poet.
- WHITNEY, Eli (1765-1825), American inventor.
- WHITTIER, John Greenleaf (1807-1892), American poet.
- WILCOX, Ella (nee Wheeler) (1850-1919), American poet.
- WILDE, Oscar Fingal O'Flahertie Wills (1856-1900), Irish dramatist & poet.
- WILLIAMS, Roger (1603?-1683), American colonial clergyman (born England).
- WILLKIE, Wendell Lewis (1892-1944), American lawyer & politician.
- WISE, Stephen Samuel (1874-1949), American rabbi (born Hungary).
- WOLFE, Thomas Clayton (1900-1938), American novelist.
- WOLSEY, Thomas (1475?-1530), English prelate & statesman.
- WOOD, Grant (1892-1942), American painter.
- WOOLF, Adeline Virginia (nee Stephen) (1882-1941), English novelist.
- WOOLLCOTT, Alexander (1887-1943), American author.
- WORDSWORTH, William (1770-1850), English poet.
- WRIGHT, Orville (1871-1948), American inventor.
- WRIGHT, Wilbur (1867-1912), American inventor.
- YEATS, William Butler (1865-1939), Irish poet.
- YOUNG, Brigham (1801-1877), American Mormon leader.
- YOUNG, Roland (1887-1953), American actor (born England).
- ZIEGFELD, Florenz (1867-1932), American theatrical producer.
- ZOLA, Émile (1840-1902), French novelist.
- ZOROASTER (or ZARATHUSTRA) (c.6th century B.C.), Persian religious leader.



# SCIENCE



## MEASURES AND WEIGHTS

### UNITS OF LENGTH

#### Metric System

The meter was originally intended to be one ten-millionth of the earth's quadrant, a quadrant being one-quarter of a circumference. However, because of the difficulty of determining such a length with accuracy, this definition was abandoned. The meter is now considered to be the distance at 0°C between two microscopic marks on the International Prototype Meter, a platinum-iridium bar, kept by the International Bureau of Weights and Measures at Sèvres, France, a suburb of Paris.

In 1927, the International Conference on Weights and Measures adopted a secondary definition of the meter in terms of light-waves. According to this definition, one meter is equivalent to 1,553,164.13 wave lengths of the red light from cadmium.

Unit	Comparison	English equivalent
Millimeter (mm)	.001 meter	.0394 inch
Centimeter (cm)	.01 meter	.3937 inch
Decimeter (dm)	.1 meter	3.937 inches
Meter (m)		3.2808 feet
Dekameter (dkm)	10 meters	32.8083 feet
Hectometer (hm)	100 meters	328.0833 feet
Kilometer (km)	1000 meters	.62137 mile

#### English System

According to legend, the yard was established by Henry I as the distance from the point of his nose to the end of his thumb when his arm was outstretched. The British Imperial Yard was defined in 1878 by the Weights and Measures Act as the distance at 62°F between two fine lines on gold studs sunk in a bronze bar known as the "No. 1 Standard Yard." This is equivalent to .914399 meter. In the United States, the yard is defined in terms of the meter, using as a standard the U. S. Prototype Meter. According to this definition, the yard is 3600/3937 (or .914402) meter, slightly longer than the British Imperial Yard.

Unit	Comparison	Metric equivalent
Inch (in.)		25.4001 millimeters
Foot (ft)	12 inches	.3048 meter
Yard (yd)	36 inches 3 feet	.9144 meter
Rod (rd)	16½ feet 5½ yards	5.0292 meters
Furlong (fur.)	660 feet 220 yards 40 rods	201.1684 meters
Mile (mi)*	5280 feet 1760 yards 320 rods 8 furlongs	1.6093 kilometers

\* Known as statute mile. See nautical mile under Miscellaneous Units.

### UNITS OF AREA

#### Metric System

Unit	Comparison	English equivalent
Square millimeter (mm²)	.000001 m²	.0015 sq in.
Square centimeter (cm²)	.0001 m²	.155 sq in.
Square decimeter (dm²)	.01 m²	15.5 sq in.
Square meter (m²)*		10.7639 sq ft
Square dekameter (dkm²)†	100 m²	3.9537 sq rd
Square hectometer (hm²)‡	10,000 m²	2.471 acres
Square kilometer (km²)	1,000,000 m²	.3861 sq mi

\* Also known as a centare (ca).

† Also known as an are (a).

‡ Also known as a hectare (ha).

#### English System

Unit	Comparison	Metric equivalent
Square inch (sq in.)		6.4516 cm²
Square foot (sq ft)	144 sq in.	.0929 m²
Square yard (sq yd)	1296 sq in. 9 sq ft	.8361 m²
Square rod (sq rd)	272¼ sq ft 30¼ sq yds	25.293 m²
Acre	43,560 sq ft 4,840 sq yd 160 sq rd	.4047 ha
Square mile (sq mi)	27,878,400 sq ft 3,097,600 sq yd 102,400 sq rd 640 acres	2.5900 km²

### UNITS OF VOLUME

#### Metric System

Unit	Comparison	English equivalent
Cubic millimeter (mm³)	.000000001 m³	.00006 cu in.
Cubic centimeter (cm³)	.000001 m³	.061 cu in.
Cubic decimeter (dm³)	.001 m³	61.0234 cu in.
Cubic meter (m³)*		35.3145 cu ft

\* Also known as a stere (s).

#### English System

Unit	Comparison	Metric equivalent
Cubic inch (cu in.)		16.3872 cm³
Cubic foot (cu ft)	1728 cu in.	.0283 m³
Cubic yard (cu yd)	46,656 cu in. 27 cu ft	.7646 m³
Cord (cd)	128 cu ft	3.6246 m³

## UNITS OF WEIGHT OR MASS

The term *mass* denotes the amount of matter contained in an object, while the term *weight* denotes the gravitational pull of the earth on the object. For practical purposes, the two terms are synonymous.

### Metric System

The gram was originally intended to be equal to the mass of one cubic centimeter of pure water at 4°C. However, because of

the difficulty of making exact measurement, a small error was made; and it has since been found that a kilogram of pure water occupies 1.000028 cubic decimeters. The standard for the kilogram is a platinum-iridium cylinder, called the International Prototype Kilogram, which is kept at the International Bureau of Weights and Measures in France.

Unit	Comparison	Avdp.	English equivalents Troy	Apoth.
Milligram (mg)	.001 gram	.0154 grain	.0154 grain	.0154 grain
Centigram (cg)	.01 gram	.1543 grain	.1543 grain	.1543 grain
Decigram (dg)	.1 gram	1.5432 grains	1.5432 grains	1.5432 grains
Gram (g)		.0353 ounce	.0322 ounce	.0322 ounce
Dekagram (dkg)	10 grams	.3527 ounce	.3215 ounce	.3215 ounce
Hectogram (hg)	100 grams	3.5274 ounces	3.2151 ounces	3.2151 ounces
Kilogram (kg)	1000 grams	2.2046 pounds	2.6792 pounds	2.6792 pounds
Metric ton (t)	1000 kg	1.1023 tons*		

\* Short tons. A metric ton is equivalent to .9842 long ton.

### English System

The English System is complicated by the existence of three different kinds of weight: *avoirdupois weight*, used for common purposes; *troy weight*, used for weighing gold, silver, etc.; and *apothecaries weight*, used for making up medical prescriptions.

The British Imperial Pound (*avoirdupois*) is defined as the mass of a pure plat-

inum cylinder kept by the Standards Department of the Board of Trade. In the United States, the pound (*avoirdupois*) is defined in terms of the kilogram, using as a standard the U. S. Prototype Kilogram. According to this definition, the pound is equal to .4535924277 kilogram, making it infinitesimally smaller than the British Imperial Pound.

### Avoirdupois Weight

Unit	Comparison	Metric equivalent
Grain		.0648 gram
Dram (dr avdp)	27.3438 grains	1.7718 grams
Ounce (oz avdp)	16 drams	28.3495 grams
	437.5 grains	
Pound (lb avdp)	7000 grains	.4536 kilogram
	256 drams	
	16 ounces	
Hundredweight (cwt)*	100 pounds	45.3592 kilograms
Ton (tn)†	2000 pounds	.9072 metric ton

\* Known as the short hundredweight, which is in use in the United States and Canada. Great Britain uses the long hundredweight (112 lb or 50.8024 kg).

† Known as the short ton, which is in use in the United States and Canada. Great Britain uses the long ton (2240 lb or 1.01605 metric tons).

### Troy Weight

Unit	Comparison	Metric equivalent
Grain		.0648 gram
Pennyweight (dwt)	24 grains	1.5552 grams
Ounce (oz t)	480 grains	31.1035 grams
	20 pennyweights	
Pound (lb t)*	5760 grains	.3732 kilogram
	240 pennyweights	
	12 ounces	

\* Declared illegal in Great Britain.

### Apothecaries Weight

Unit	Comparison	Metric equivalent
Grain		.0648 gram
Scruple (s ap or ℥)	20 grains	1.296 grams
Dram (dr ap or ℥)	60 grains	3.8879 grams
	3 scruples	
Ounce (oz ap or ℥)	480 grains	31.1035 grams
	24 scruples	
	8 drams	
Pound (lb ap)	5760 grains	.3732 kilogram
	288 scruples	
	96 drams	
	12 ounces	

## UNITS OF CAPACITY

### Metric System

The liter is a secondary unit of capacity defined as the volume occupied by one kilogram of pure water at 4°C. It was intended that the liter should exactly equal one cubic decimeter, but as an error was made in measurement, has since been found to equal 1.000028 cubic decimeters.

Unit	Comparison	English equivalents Liquid	Dry
Milliliter (ml)	.001 liter	.0338 fl oz	.0018 pt
Centiliter (cl)	.01 liter	.3381 fl oz	.0182 pt
Deciliter (dl)	.1 liter	3.3815 fl oz	.1816 pt
Liter (l)		1.0567 qt	.9081 qt
Dekaliter (dkl)	10 liters	2.6418 gal	1.1351 pk
Hectoliter (hl)	100 liters	26.4178 gal	2.8378 bu

## English System

In Great Britain, the standard unit of capacity for measuring both liquid and dry commodities is the British Imperial Gallon. It is defined as the volume of ten pounds of pure water at 62°F and contains 277.418 cubic inches. The bushel is defined as eight gallons (2218.192 cubic inches).

In the United States, there are two separate standards. The unit for measuring liquids is the gallon, which is defined as 231 cubic inches; the unit for measuring dry commodities is the bushel, which is defined as 2150.42 cubic inches.

## UNITS OF CIRCULAR MEASURE

Unit	Comparison
Second (")	
Minute (')	60 seconds
Degree (°)	60 minutes
Right angle	90 degrees
Straight angle	180 degrees
Circle	360 degrees

## Circumference

Circle:  $C = \pi d$ , in which  $\pi$  is 3.1416 and  $d$  the diameter.

## Area

Triangle:  $A = \frac{ab}{2}$ , in which  $a$  is the base and  $b$  the height.

Square:  $A = a^2$ , in which  $a$  is one of the sides.

Rectangle:  $A = ab$ , in which  $a$  is the base and  $b$  the height.

Trapezoid:  $A = \frac{h(a+b)}{2}$ , in which  $h$  is the height,  $a$  the longer parallel side, and  $b$  the shorter.

Regular pentagon:  $A = 1.720a^2$ , in which  $a$  is one of the sides.

Regular hexagon:  $A = 2.598a^2$ , in which  $a$  is one of the sides.

Regular octagon:  $A = 4.828a^2$ , in which  $a$  is one of the sides.

Circle:  $A = \pi r^2$ , in which  $\pi$  is 3.1416 and  $r$  the radius.

## Volume

Cube:  $V = a^3$ , in which  $a$  is one of the edges.

Rectangular prism:  $V = abc$ , in which  $a$  is the length,  $b$  the width, and  $c$  the depth.

Pyramid:  $V = \frac{Ah}{3}$ , in which  $A$  is the area of the base and  $h$  the height.

## Liquid Measure (U. S.)

Unit	Comparison	Cubic inches	Metric equivalent
Minim (min or m)*		.0038	.0616 ml
Fluid dram (fl dr)	60 min	.2256	3.6966 ml
Fluid ounce (fl oz)	8 fl dr	1.8047	29.5729 ml
Gill (gi)	32 fl dr	7.2188	118.292 ml
	4 fl oz		
Pint (pt)	16 fl oz	28.875	.4732 liter
	4 gi		
Quart (qt)	32 fl oz	57.75	.9463 liter
	8 gi		
	2 pt		
Gallon (gal)	32 gi	231	3.7853 liters
	8 pt		
	4 qt		

\* Approximately one drop.

## Dry Measure (U. S.)

Unit	Comparison	Cubic inches	Metric equivalent
Pint (pt)		33.6003	.5506 liter
Quart (qt)	2 pints	67.2006	1.1012 liters
Peck (pk)	16 pints	537.605	8.8096 liters
	8 quarts		
Bushel (bu)	64 pints	2150.42	35.2383 liters
	32 quarts		
	4 pecks		

## COMMON FORMULAS

Cylinder:  $V = \pi r^2 h$ , in which  $\pi$  is 3.1416,  $r$  the radius of the base, and  $h$  the height.

Cone:  $V = \frac{\pi r^2 h}{3}$ , in which  $\pi$  is 3.1416,  $r$  the radius of the base, and  $h$  the height.

Sphere:  $V = \frac{4\pi r^3}{3}$ , in which  $\pi$  is 3.1416 and  $r$  the radius.

## Miscellaneous

Speed per second acquired by falling body:  $v = 32t$ , in which  $t$  is the time in seconds.

Distance in feet traveled by falling body:  $d = 16t^2$ , in which  $t$  is the time in seconds.

Speed of sound in feet per second through any given temperature of air:

$$V = \frac{1087\sqrt{273+t}}{16.52}, \text{ in which } t \text{ is the temperature Centigrade.}$$

Cost per hour of operation of electrical device:  $C = \frac{Wtc}{1000}$ , in which  $W$  is the number of watts,  $t$  the time in hours, and  $c$  the cost per kilowatt-hour.

Conversion of matter into energy (Einstein's Theorem):  $E = mc^2$ , in which  $E$  is the energy in ergs,  $m$  the mass of the matter in grams, and  $c$  the speed of light in centimeters per second. ( $c^2 = 9 \cdot 10^{20}$ ).

## Abbreviations

The National Bureau of Standards recommends that the period be omitted after all abbreviations of units unless the

abbreviation forms an English word, and that the same abbreviation be used for both singular and plural.



## FAHRENHEIT AND CENTIGRADE SCALES

Zero on the Fahrenheit scale represents the temperature produced by the mixing of equal weights of snow and common salt.

Absolute zero is theoretically the lowest possible temperature, the point at which all molecular motion would cease.

	F	C
Boiling point of water	212°	100°
Freezing point of water	32°	0°
Absolute zero	-459.6°	-273.1°

To convert Fahrenheit to Centigrade, subtract 32 and multiply by 5/9.

To convert Centigrade to Fahrenheit, multiply by 9/5 and add 32.

## ROMAN NUMERALS

Roman numerals are expressed by letters of the alphabet and are rarely used today except for formality or variety.

There are three basic principles for reading Roman numerals:

1. A letter repeated once or twice repeats its value that many times. (XXX=30, CC=200, etc.).

2. One or more letters placed after another letter of greater value increases the greater value by the amount of the smaller. (VI=6, LXX=70, MCC=1200, etc.).

3. A letter placed before another letter of greater value decreases the greater value by the amount of the smaller. (IV=4, XC=90, CM=900, etc.).

Letter	Value	Letter	Value
I	1	LX	60
II	2	LXX	70
III	3	LXXX	80
IV	4	XC	90
V	5	C	100
VI	6	D	500
VII	7	M	1,000
VIII	8	V	5,000
IX	9	X	10,000
X	10	L	50,000
XX	20	C	100,000
XXX	30	D	500,000
XL	40	M	1,000,000
L	50		

## SIMPLE INTEREST FOR \$100

To find the interest for any amount of money, move the decimal point of that amount two places to the left and multi-

ply by the figure obtained from the table.

For figuring simple interest, the year is considered to have 360 days.

	1 Day	7 Days	1 Month	3 Months	6 Months	1 Year
2%	\$.00556	\$.03889	\$.16667	\$.50000	\$1.00000	\$2.00000
2½%	.00694	.04861	.20833	.62500	1.25000	2.50000
3%	.00833	.05833	.25000	.75000	1.50000	3.00000
3½%	.00972	.06806	.29167	.87500	1.75000	3.50000
4%	.01111	.07778	.33333	1.00000	2.00000	4.00000
4½%	.01250	.08750	.37500	1.12500	2.25000	4.50000
5%	.01389	.09722	.41667	1.25000	2.50000	5.00000
5½%	.01528	.10694	.45833	1.37500	2.75000	5.50000
6%	.01667	.11667	.50000	1.50000	3.00000	6.00000
6½%	.01806	.12639	.54167	1.62500	3.25000	6.50000
7%	.01944	.13611	.58333	1.75000	3.50000	7.00000
8%	.02222	.15556	.66667	2.00000	4.00000	8.00000
9%	.02500	.17500	.75000	2.25000	4.50000	9.00000
10%	.02778	.19444	.83333	2.50000	5.00000	10.00000

## MISCELLANEOUS UNITS

**AGATE:** Originally a measurement of type size (5½ points). Now equal to 1/14 inch. Used in printing for measuring column length.

**ANGSTROM (A or λ):** .0001 micron or .0000001 mm. Used for measuring length of light waves.

**ASTRONOMICAL UNIT (A.U.):** 93,003,000 miles, the average distance of the earth from the sun. Used in astronomy.

**BALE:** A large bundle of goods. In the U. S., the approximate weight of a bale of cotton is 500 pounds. The weight varies in other countries.

**BARREL (bbl):** For liquids, 31½ gallons or 7326.5 cubic inches. For dry commodities, except cranberries: 105 dry quarts or 7056 cubic inches. For cranberries: 5826 cubic inches.

**BOARD FOOT (fbm):** 144 cubic inches (12 in. x 12 in. x 1 in.). Used for lumber.

**BOLT:** 40 yards. Used for measuring cloth.

**CABLE:** About 100 fathoms or 600 feet. Used for measuring lengths of cable.

**CARAT (c):** 200 milligrams or 3.086 grains troy. Originally the weight of a seed of the carob tree in the Mediterranean region. Used for weighing precious stones. Also a measure of the purity of gold alloy, indicating how many parts out of 24 are pure. Eighteen carat gold, for example, is ¾ pure.

**CHAIN (ch):** a chain 66 feet or one-tenth of a furlong in length, divided into 100 parts called links. One mile is equal to 80 chains. Used in surveying and sometimes called Gunter's chain.

**CUBIT:** 18 inches or 45.72 cm. Derived from distance between elbow and tip of middle finger.

**ELL, ENGLISH:** 1¼ yards or 1/32 bolt. Used for measuring cloth.

**FATHOM (fath):** 6 feet or 1.8288 m. Derived from the distance to which a man can stretch his arms. Used for measuring cables and depths of water.

**FREIGHT TON** (also called **MEASURE-MENT TON**): 40 cubic feet of merchandise. Used for cargo freight.

**GREAT GROSS:** 12 gross or 1728.

**GROSS:** 12 dozen or 144.

**HAND:** 4 inches or 10.16 cm. Derived from the width of the hand. Used for measuring the height of horses at withers.

**HOGSHEAD (hhd):** 2 liquid barrels or 14,653 cubic inches.

**HORSEPOWER:** The power needed to lift 33,000 pounds a distance of one foot in one minute (about 1½ times the power an average horse can exert). Used for measuring the power of steam engines, etc.

**KNOT:** Not a distance, but the rate of speed of one nautical mile per hour. Used for measuring speed of ships.

**LEAGUE:** Rather indefinite and varying measure, but usually estimated at 3 miles in English-speaking countries.

**LIGHT-YEAR:** 5,880,000,000,000 miles, the distance light travels in a year at the rate of 186,272 miles per second. (If an astronomical unit were represented by one inch, a light-year would be represented by about one mile.) Used for measurements in interstellar space.

**LINK:** One-hundredth of a chain or 7.92 inches. Used in surveying.

**MAGNUM:** Two-quart bottle. Used for measuring wine, etc.

**MICRON (μ):** .001 millimeter. Used for scientific measurements.

**MIL:** .001 inch. Used for measuring size of wire. The area of a cross-section of wire is usually expressed in circular mils, a circular mil being the area of a circle one mil in diameter. A wire one inch in diameter has a cross-section area of one million circular mils.

**MILLIMICRON (mμ):** .001 micron or .000001 mm. Used for scientific measurements.

**NAUTICAL MILE** (also called **GEOGRAPHICAL** or **SEA MILE**): Equal to a minute or 1/21600 of a great circle of the earth. Length varies in different countries. In Great Britain, it is 6080 feet or 1853.2 meters, and in the United States, it is 6080.2 feet or 1853.248 meters. The International Hydrographic Bureau proposed in 1929 a length of 1852 meters or 6076.097 feet, which has been adopted by several countries.

**PARSEC:** Approximately 3.26 light-years or 19.2 trillion miles. Term is combination of first syllables of *parallax* and *second*, and distance is that of imaginary star when lines drawn from it to both earth and sun form a maximum angle or parallax of one second (1/3600 degree). Used for measuring interstellar distances.

**PI (π):** 3.14159265+. The ratio of the circumference of a circle to its diameter. For practical purpose, the value is used to four decimal places: 3.1416.

**PICA:** ½ inch or 12 points. Used in printing for measuring column width, etc.

**PIPE:** 2 hogsheads. Used for measuring wine and other liquids.

**POINT:** .013837 (approximately 1/72) inch or 1/12 pica. Used in printing for measuring type size.

**QUINTAL:** 100,000 grams or 220.46 pounds avoirdupois.

**QUIRE:** Used for measuring paper. Sometimes 24 sheets but more often 25. There are 20 quires in a ream.

**REAM:** Used for measuring paper. Sometimes 480 sheets, but more often 500 sheets.

**SCORE:** 20 units.

**SPAN:** 9 inches or 22.86 cm. Derived from the distance between the end of the thumb and the end of the little finger when both are outstretched.

**STONE:** Legally 14 pounds avoirdupois in Great Britain.

**TOWNSHIP:** U. S. land measurement of almost 36 square miles. The south border is 6 miles long. The east and west borders, also 6 miles long, follow the meridians, making the north border slightly less than six miles long. Used in surveying.

**TUN:** 252 gallons, but often larger. Used for measuring wine and other liquids.

DECIMAL EQUIVALENTS OF COMMON FRACTIONS

$\frac{1}{2}$	.5000	$\frac{1}{8}$	.1250	$\frac{3}{4}$	.7500	$\frac{5}{8}$	.6250
$\frac{1}{3}$	.3333	$\frac{1}{4}$	.2500	$\frac{1}{2}$	.5000	$\frac{1}{4}$	.2500
$\frac{1}{4}$	.2500	$\frac{2}{3}$	.6667	$\frac{1}{3}$	.3333	$\frac{3}{4}$	.7500
$\frac{1}{5}$	.2000	$\frac{1}{5}$	.2000	$\frac{2}{5}$	.4000	$\frac{1}{5}$	.2000
$\frac{1}{6}$	.1667	$\frac{2}{7}$	.2857	$\frac{3}{7}$	.4286	$\frac{4}{7}$	.5714
$\frac{1}{7}$	.1429	$\frac{1}{6}$	.1667	$\frac{5}{6}$	.8333	$\frac{1}{6}$	.1667
$\frac{1}{8}$	.1250	$\frac{2}{11}$	.1818	$\frac{3}{11}$	.2727	$\frac{4}{11}$	.3636
$\frac{1}{9}$	.1111	$\frac{3}{4}$	.7500	$\frac{1}{4}$	.2500	$\frac{5}{11}$	.4545
$\frac{1}{10}$	.1000	$\frac{3}{5}$	.6000	$\frac{2}{5}$	.4000	$\frac{6}{11}$	.5455
$\frac{1}{11}$	.0909	$\frac{3}{7}$	.4286	$\frac{4}{7}$	.5714	$\frac{7}{11}$	.6364
$\frac{1}{12}$	.0833	$\frac{4}{7}$	.5714	$\frac{5}{7}$	.7143	$\frac{8}{11}$	.7273
$\frac{1}{16}$	.0625	$\frac{5}{10}$	.5000	$\frac{6}{10}$	.6000	$\frac{9}{11}$	.8182
		$\frac{6}{10}$	.6000	$\frac{7}{10}$	.7000	$\frac{10}{11}$	.9091
		$\frac{7}{10}$	.7000	$\frac{8}{10}$	.8000	$\frac{11}{12}$	.9167

Handy Conversion Factors

To change	To	Multi- ply by
acres	hectares	.4047
bushels (U. S.)	hectoliters	.3524
centimeters	inches	.3937
cubic feet	cubic meters	.0283
cubic meters	cubic feet	35.3145
cubic meters	cubic yards	1.3079
cubic yards	cubic meters	.7646
feet	meters	.3048
gallons (U. S.)	liters	3.7853
grains	grams	.0648
grams	grains	15.4324
grams	ounces avdp.	.0353
hectares	acres	2.4710
hectoliters	bushels (U. S.)	2.8378
inches	millimeters	25.4001
inches	centimeters	2.5400
kilograms	pounds ap or t	2.6792
kilograms	pounds avdp.	2.2046
kilometers	miles	.6214
liters	gallons (U. S.)	.2642
liters	pecks	.1135
liters	pints (dry)	1.8162
liters	pints (liquid)	2.1134
liters	quarts (dry)	.9081
liters	quarts (liquid)	1.0567
meters	feet	3.2808
meters	yards	1.0936
metric tons	tons (long)	.9842
metric tons	tons (short)	1.1023
miles	kilometers	1.6093
millimeters	inches	.0394
ounces avdp.	grams	28.3495
pecks	liters	8.8096
pints (dry)	liters	.5506
pints (liquid)	liters	.4732
pounds ap or t	kilograms	.4536
pounds avdp.	kilograms	.4536
quarts (dry)	liters	1.1012
quarts (liquid)	liters	.9463
square feet	square meters	.0929
square meters	square feet	10.7639
square meters	square yards	1.1960
square yards	square meters	.8361
tons (long)	metric tons	1.0160
tons (short)	metric tons	.9072
yards	meters	.9144

Perfect Squares and Cubes, 1 to 2025

Number	Square root	Cube root	Number	Square root	Cube root
1	1	1	512	22	8
4	2	..	529	23	..
8	..	2	576	24	..
9	3	..	625	25	..
16	4	..	676	26	..
25	5	..	729	27	9
27	..	3	784	28	..
36	6	..	841	29	..
49	7	..	900	30	..
64	8	4	961	31	..
81	9	..	1000	..	10
100	10	..	1024	32	..
121	11	..	1089	33	..
125	..	5	1156	34	..
144	12	..	1225	35	..
169	13	..	1296	36	..
196	14	..	1331	..	11
216	..	6	1369	37	..
225	15	..	1444	38	..
256	16	..	1521	39	..
289	17	..	1600	40	..
324	18	..	1681	41	..
343	..	7	1728	..	12
361	19	..	1764	42	..
400	20	..	1849	43	..
441	21	..	1936	44	..
484	22	..	2025	45	..

Mean and Median

The mean, also called the average, of a series of quantities is obtained by finding the sum of the quantities and dividing it by the number of quantities. In the series 1,3,5,18,19,20,25, the mean or average is 13 —i.e., 91 divided by 7.

The median of a series is that point which so divides it that half the quantities are on one side, half on the other. In the above series, the median is 18.

The median often better expresses the common-run, since it is not, as is the mean, affected by an excessively high or low figure. In the series 1,3,4,7,55, the median of 4 is a truer expression of the common-run than is the mean of 14.



## Calories and Vitamins of Selected Foods

Source: U. S. Dept. of Agriculture, Agriculture Handbook No. 8 (June, 1950).

Food and (amount) <sup>1</sup>	Energy, calories	Vitamin A value, Int. Units	Thiamine, mg.	Riboflavin, mg.	Niacin, mg.	Ascorbic acid, mg.
Apples (1 medium R).....	76	120	.05	.04	.2	6
Bacon: medium fat (2 sl. C).....	97	(0)	.08	.05	.8	0
Bananas (1 medium R).....	88	430	.04	.05	.7	10
Beans: snap, green (1 cup C) <sup>2</sup> .....	27	830	.09	.12	.6	18
Beef: sirloin <sup>3</sup> (3 oz. C).....	257	30	.06	.16	4.1	0
Beets: red, diced (1 cup C).....	68	30	.03	.07	.5	11
Bread: rye (1 sl.).....	57	0	.04	.02	.4	(0)
Bread: white, enriched <sup>4</sup> (1 sl.).....	63	0	.06	.04	.5	(0)
Bread: wholewheat (1 sl.).....	55	0	.07	.03	.7	(0)
Butter (1 tbs.).....	100	460 <sup>5</sup>	...	...	...	(0)
Buttermilk: cultured <sup>6</sup> (1 cup).....	86	10	.09	.43	.3	3
Cabbage (1 cup R).....	24	80	.06	.05	.3	50
Carrots: diced (1 cup C).....	44	18,130	.07	.07	.7	6
Cheese: Swiss (1 oz.).....	105	410	trace	(.11)	(trace)	(0)
Cheese: cottage <sup>6</sup> (1 cup).....	215	(50)	.04	.59	(.2)	(0)
Chicken: roasters <sup>7</sup> (4 oz. R).....	227	460	.09	.18	9.1	(0)
Chocolate: unsweetened (1 oz.).....	143	20	.01	.06	.3	(0)
Corn (1 ear C).....	84	390 <sup>8</sup>	.11	.10	1.4	8
Crackers: graham (2 medium).....	55	(0)	.04	.02	.2	(0)
Cream: light (½ pt.).....	489	1,980	.07	.34	.2	3
Eggs: poached (1).....	77	540	.04	.12	trace	0
Flour: wheat, enriched <sup>9</sup> (1 cup).....	401	(0)	.48	.29	3.8	(0)
Grapefruit (½ medium).....	75	20	.07	.04	.4	76
Ham: smoked <sup>3</sup> (3 oz. C).....	339	(0)	.46	.18	3.5	0
Hamburger (3 oz. C).....	316	40	.07	.16	4.1	0
Honey (1 tbs.).....	62	(0)	trace	.01	trace	1
Ice cream (1/7 qt.).....	167	420	.03	.15	.1	1
Lamb: leg roast <sup>3</sup> (3 oz. C).....	230	...	.12	.21	4.4	0
Lemons (1 medium).....	20	0	.03	trace	.1	31
Liver: calf (3 oz. R).....	120	19,130	.18	2.65	13.7	30
Macaroni: enriched (1 cup C).....	209	(0)	.24	.15	2.0	(0)
Margarine <sup>10</sup> (1 tbs.).....	101	460	...	...	...	(0)
Milk: fluid, whole (1 cup).....	166	(390)	.09	.42	.3	3
Molasses: cane, medium (1 tbs.).....	46	...	...	.02	.2	...
Oatmeal (1 cup C).....	148	(0)	.22	.05	.4	(0)
Oranges (1 medium).....	70	(290)	.12	.04	.4	77
Oysters <sup>11</sup> (1 cup R).....	200	770	.35	.48	2.8	...
Peaches (1 medium R).....	46	880	.02	.05	.9	8
Peanut butter (1 tbs.).....	92	0	.02	.02	2.6	(0)
Peanuts: roasted, chopped (1 tbs.)...	50	0	.03	.01	1.5	(0)
Peas: green, immature (1 cup C).....	111	1,150	.40	.22	3.7	24
Plums (1 R).....	29	200	.04	.02	.3	3
Pork: loin <sup>3</sup> (3 oz. C).....	284	(0)	.71	.20	4.3	0
Potatoes: white (1 cup mashed) <sup>12</sup> ...	159	50	.16	.10	1.7	14
Prunes: unsulfured <sup>14</sup> (1 cup C).....	310	2,210	.07	.20	2.0	2
Raisins: unsulfured (1 tbs.).....	26	trace	.02	.01	trace	trace
Rice: white (1 cup C).....	201	(0)	.02	.01	.7	(0)
Round steak <sup>3</sup> (3 oz. C).....	197	20	.06	.19	4.7	0
Salmon: pink, canned (3 oz.).....	122	60	.03	.16	6.8	(0)
Sausage: pork, canned (4 oz.).....	340	(0)	.23	.27	3.4	0
Spaghetti: enriched (1 cup C).....	218	(0)	.25	.15	2.1	(0)
Spinach (1 cup C).....	46	21,200	.14	.36	1.1	54
Sugar: granulated (1 tsp.).....	16	(0)	(0)	(0)	(0)	(0)
Sweetpotatoes (1 baked).....	183	11,410 <sup>12</sup>	.12	.08	.9	28
Tomatoes (1 medium R).....	30	1,640	.08	.06	.8	35
Turkey: medium fat (4 oz. R).....	304	...	.10	.16	9.1	(0)
Turnips: diced (1 cup C).....	42	trace	.06	.09	.6	28
Veal cutlet <sup>3</sup> (3 oz. C).....	184	...	.07 <sup>15</sup>	.24 <sup>15</sup>	5.2 <sup>15</sup>	0

<sup>1</sup> R—raw; C—cooked. <sup>2</sup> Cooked short time in small amount of water. <sup>3</sup> Boneless. <sup>4</sup> 4% nonfat milk solids. <sup>5</sup> Year-round average. <sup>6</sup> Made from skim milk. <sup>7</sup> Bone out. Vitamin values based on muscle meat only. <sup>8</sup> Based on yellow corn; white corn contains only a trace. <sup>9</sup> Patent. <sup>10</sup> Vitamin A added. <sup>11</sup> Meat only. <sup>12</sup> If very pale varieties only were used, value would be much lower. <sup>13</sup> Milk added. <sup>14</sup> No sugar added. <sup>15</sup> Data assume cut to be thiamine and niacin and 25% more riboflavin. Use of proportionate quantity of drippings would add approximately 50% more thiamine and niacin and 25% more riboflavin.

NOTE: Parentheses denote imputed values. The sign ... shows that no basis could be found for imputing a value although there was some reason to believe that a measurable amount might be present.

## Chemical Elements

Source: Professor Philip S. Chen, Atlantic Union College.

Atomic number	Element	Symbol	Atomic weight	Density gm/cc	Melting point °C.	Boiling point °C.	Valence*	Number of isotopes†	Discoverer	Date discovered
1	Hydrogen	H	1.0080	0.07†	-259.14	-252.7	1	3	Cavendish	1766
2	Helium	He	4.003	0.15†	<-272.2	-268.9	0	3	Ramsay	1895
3	Lithium	Li	6.940	0.534	186.	>1200.	1	4	Arfvedson	1817
4	Beryllium*** (Glucinum)	Be	9.013	1.84	1350.	1500.	2	4	Vauquelin	1798
5	Boron	B	10.82	2.535§	2300.	2500.	3	4	Gay-Lussac and Thenard; Davy	1808
6	Carbon	C	12.010	2.25**	>3500.	4200.	2, 3 or 4	6	Prehistoric	.....
7	Nitrogen	N	14.008	0.810†	-209.86	-195.3	3 or 5	6	Rutherford	1772
8	Oxygen	O	16.0000	1.14†	-218.4	-183.00	2	6	Priestley	1774
9	Fluorine	F	19.00	1.14†	-223.	-187.	1	4	Moissan	1886
10	Neon	Ne	20.183	0.90035 (g/10°C. 760mm)	-248.67	-245.9	0	5	Ramsay and Travers	1898
11	Sodium	Na	22.997	0.9287†	97.5	880.	1	6	Davy	1807
12	Magnesium	Mg	24.32	1.741	651.	1110.	2	6	Davy	1808
13	Aluminum	Al	26.98	2.699†	660.0	1800.	3	6	Wöhler	1827
14	Silicon	Si	28.09	2.42**	1420.	2600.	4	6	Berzelius	1824
15	Phosphorus	P	30.975	1.83 (white)	44.1	280.	3 or 5	6	Brand	1669
16	Sulfur	S	32.066	2.0-1	112.8	444.6	2, 4 or 6	7	Prehistoric	.....
17	Chlorine	Cl	35.457	1.507†	-101.6	-34.6	1, 3, 5 or 7	7	Scheele	1774
18	Argon	A	39.944	1.423†	-189.2	-185.7	0	7	Rayleigh and Ramsay	1894
19	Potassium	K	39.100	0.87	62.3	760.	1	7	Davy	1807
20	Calcium	Ca	40.08	1.54	810.	1170.	2	9	Davy	1808
21	Scandium	Sc	44.96	3.62 (10°C.)	1200.	2400.	3	8	Nilson	1879
22	Titanium	Ti	47.90	4.5	1800.	>3000.	3 or 4	6	Gregor	1791
23	Vanadium	V	50.95	5.69	1710.	3000.	2, 3, 4 or 5	8	Sefstrom	1830
24	Chromium	Cr	52.01	6.92	1615.	2200.	2, 3 or 6	8	Vauquelin	1798
25	Manganese	Mn	54.93	7.42	1260.	1900.	2, 3, 4, 6 or 7	6	Gahn	1774
26	Iron	Fe	55.85	7.85-88	1535.	3000.	2, 3 or 6	8	Prehistoric	.....
27	Cobalt	Co	58.94	8.9	1480.	2900.	2 or 3	8	Brandt	1735
28	Nickel	Ni	58.69	8.60-90	1452.	2900.	2 or 3	11	Cronstedt	1751
29	Copper	Cu	63.54	8.30-95	1083.	2300.	1 or 2	9	Prehistoric	.....
30	Zinc	Zn	65.38	7.04-16	419.43	907.	2	11	Marggraf	1746
31	Gallium	Ga	69.72	5.903	29.75	>1600.	2 or 3	9	Boisbaudran	1875
32	Germanium	Ge	72.60	5.46	958.5	2700.	4	13	Winkler	1886
33	Arsenic	As	74.91	5.73	814.	615.	3 or 5	8	Albertus Magnus	1250§
34	Selenium	Se	78.96	4.3-8	220.	688.	2, 4 or 6	12	Berzelius	1818
35	Bromine	Br	79.916	3.12†	-7.2	58.78	1, 3, 5 or 7	12	Balard	1826
36	Krypton	Kr	83.80	2.16†	-169.	-151.8	0	11	Ramsay and Travers	1898
37	Rubidium	Rb	85.48	1.532	38.5	700.	1	16	Bunsen and Kirchhoff	1861
38	Strontium	Sr	87.63	2.50-58	890.	1150.	2	16	Davy	1808
39	Yttrium	Y	88.92	3.80	1490.	250.	3	15	Gadolin	1794
40	Zirconium	Zr	91.22	6.44	1700.	>2900.	4	12	Klaproth	1789
41	Niobium*** (Columbium)	Nb	92.91	8.4	1950.	>3300.	3 or 5	10	Hatchett	1801
42	Molybdenum	Mo	95.95	9.01	2620 ± 10	3700.	2, 3, 4, 5 or 6	13	Hjelm	1781
43	Technetium	Tc	98.	11.487	2300.	.....	2, 3, 4 or 10†† 6	11	Perrier and Segre	1937
44	Ruthenium	Ru	101.7	12.06	2450.	>2700.	3, 4, 6 or 8	12	Klaus	1844
45	Rhodium	Rh	102.91	12.44	1955.	>2500.	3	8	Wollaston	1803
46	Palladium	Pd	106.7	12.16 (20°C.)	1555.	2200.	2 or 4	13	Wollaston	1803
47	Silver	Ag	107.880	10.503††	960.5	1950.	1	12	Prehistoric	.....
48	Cadmium	Cd	112.41	8.648	320.9	767.	2	14	Stromeyer	1817
49	Indium	In	114.76	7.28	155.	1450.	1 or 3	13	Reich and Richter	1863
50	Tin	Sn	118.70	7.29	231.83	2260.	2 or 4	18	Prehistoric	.....
51	Antimony	Sb	121.76	6.618	630.5	1380.	3 or 5	16	Prehistoric	.....
52	Tellurium	Te	127.61	6.25**	452.	1390.	2, 4, or 6	17	von Richenstein	1782
53	Iodine	I	126.91	4.94	113.5	184.35	1, 3, 5 or 7	18	Courtois	1811

Atomic number	Element	Symbol	Atomic weight	Density gm/cc	Melting point °C.	Boiling point °C.	Valence*	Number of isotopes†	Discoverer	Date discovered
54	Xenon	Xe	131.3	3.52†	-140.	-109.1	0	23	Ramsay and Travers	1898
55	Cesium	Cs	132.91	1.873	26.	670.	1	18	Bunsen and Kirchhoff	1860
56	Barium	Ba	137.36	3.78	850.	1140.	2	17	Davy	1808
57	Lanthanum	La	138.92	6.5	826.	1800.	3	13	Mosander	1839
58	Cerium	Ce	140.13	6.9	770.	1400.	3 or 4	12	Klaproth; Berzelius and Hisinger	1803
59	Praseodymium	Pr	140.92	6.475	940.	.....	3, 4 or 5	8	Auer von Welsbach	1885
60	Neodymium	Nd	144.27	6.96	840.	.....	3	13	Auer von Welsbach	1885
61	Promethium	Pm	147.	.....	.....	.....	3	8††	Marinsky and Glendenin	1945
62	Samarium	Sm	150.43	7.7-8	1350.	.....	2 or 3	12	Boisbaudran	1879
63	Europium	Eu	152.0	5.24	1100.	.....	2 or 3	12	Demarcay	1901
64	Gadolinium	Gd	156.9	7.95	.....	.....	3	13	Marignac	1880
65	Terbium	Tb	159.2	8.33	.....	.....	3 or 4	8	Mosander	1843
66	Dysprosium	Dy	162.46	8.56	.....	.....	3	10	Boisbaudran	1886
67	Holmium	Ho	164.94	8.76	.....	.....	3	7	Soret	1878
68	Erbium	Er	167.2	7.77 (†)	1250(†)	.....	3	9	Mosander	1843
69	Thulium	Tm	169.4	9.34	.....	.....	3	6	Cleve	1879
70	Ytterbium	Yb	173.04	9.01	1800.	.....	3	10	Marignac	1878
71	Lutetium	Lu	174.99	9.74	.....	.....	3 or 4	8	Urbain	1907
72	Hafnium	Hf	178.6	13.3	1700.	3200.	4	11	Coster and von Hevesy	1923
73	Tantalum	Ta	180.88	16.6	2850.	4100.	3 or 5	9	Ekeberg	1802
74	Tungsten	W	183.92	18.6-19.1	3370.	5900.	2, 4, 5 or 6	12	d'Elhuyar	1783
75	Rhenium	Re	186.31	20.53 (20°C.)	3000.	.....	4	7	Noddack and Berg	1925
76	Osmium	Os	190.2	22.5	2700.	5300.	2, 3, 4 or 8	13	Tennant	1804
77	Iridium	Ir	193.1	22.42	2350.	4800.	3 or 4	7	Tennant	1804
78	Platinum	Pt	195.23	21.37	1755.	4300.	2 or 4	9	De Ulloa	1748
79	Gold	Au	197.2	19.3††	1063.0	2600.	1 or 3	12	Prehistoric	.....
80	Mercury	Hg	200.61	13.596†	-38.87	356.90	1 or 2	12	Prehistoric	.....
81	Thallium	Tl	204.39	11.86	303.5	1650.	1 or 3	13	Crookes	1861
82	Lead	Pb	207.21	11.347††	327.5	1620.	2 or 4	15	Prehistoric	.....
83	Bismuth	Bi	209.00	9.80	271.	1450.	3 or 5	17	Geoffroy	1753
84	Polonium	Po	210.0	.....	.....	.....	..	19	Curie	1898
85	Astatine	At	211.	.....	470.	.....	1, 3, 5 or 7	15	Corson et al	1940
86	Radon	Rn	222.	9.739†	-71.	-61.8	0	6	Dorn	1900
87	Francium	Fr	223.	.....	23.	.....	1	7	Perey	1939
88	Radium	Ra	226.05	6.0	960.	1140.	2	12	Curie	1898
89	Actinium	Ac	227	.....	.....	.....	3	8	Debierne	1899
90	Thorium	Th	232.12	11.13	1845.	3000.	4	13	Berzelius	1828
91	Protactinium	Pa	231.	.....	.....	.....	5	10	Hahn and Meitner	1917
92	Uranium	U	238.07	18.7	1850.	.....	3, 4 or 6	14	Klaproth	1789
93	Neptunium	Np	239.	17.7	.....	.....	3, 4, 5 or 6	11††	McMillan and Abelson	1940
94	Plutonium	Pu	238.	.....	.....	.....	3, 4, 5 or 6	11††	Seaborg et al	1940
95	Americium	Am	241.	11.7	>850.	.....	3	8††	Seaborg et al	1944
96	Curium	Cm	242.	.....	.....	.....	3	8††	Seaborg et al	1944
97	Berkelium	Bk	243	.....	.....	.....	3 or 4	3††	Seaborg et al	1950
98	Californium	Cf	244	.....	.....	.....	3	2††	Seaborg et al	1950
99	.....	...	247	.....	.....	.....	3	1††	Ghiorso et al	1954
100	.....	...	254	.....	.....	.....	3	1††	Studier et al	1954

\* VALENCE is a measure of the extent to which an atom is able to combine directly with others.

† Isotopes are different forms of the same element, having the same atomic number but different atomic weights. The number of isotopes given includes only those that are stable and natural occurring, excluding those marked ††.

‡ Liquid. § Amorphous. ¶ Graphite. \*\* Crystalline. †† Compressed. ‡‡ Cast. §§ Exact date doubtful —Born 1193 and died 1280. ††† Have been artificially produced. \*\*\* New name adopted by International Union of Chemistry, replacing old name in parentheses. < Is less than. > Is greater than.

Figures in parentheses are tentative or theoretical.

The number of isotopes of each element is increased by discovery or by manufacture.



# Scientific Inventions, Discoveries and Theories

Source: *Encyclopaedia Britannica*.

## Inventions

- Adding machine, recording:** William S. Burroughs, 1888.
- Airplane:** Wilbur and Orville Wright, 1903.
- Air brake, railroad:** George Westinghouse, 1868.
- Air pump:** Otto von Guericke, 1650.
- Automobile:** (Product of inventions of many men. Gottlieb Daimler is frequently given credit, c.1887.)
- Bakelite:** Leo H. Baekeland, 1908.
- Balloon, hot-air:** Joseph and Jacques Montgolfier, 1783.
- Barometer:** Evangelista Torricelli, 1643.
- Camera, Kodak:** George Eastman, 1888.
- Carburetor, spray:** Charles E. Duryea, 1892.
- Cellophane:** J. E. Brandenberger, 1912.
- Celluloid:** John W. Hyatt, 1870.
- Clock, pendulum:** Christian Huygens, 1656.
- Converter, Bessemer:** William Kelly, 1851. (Patent bought by Sir Henry Bessemer, who made a similar invention in 1856.)
- Cotton gin:** Eli Whitney, 1793.
- Cyanide:** Nikodem Caro and Adolf Frank, 1905.
- Cyclotron:** Ernest O. Lawrence, 1931.
- Daguerreotype process:** Louis J. M. Daguerre, 1839.
- Diesel engine:** Rudolf Diesel, 1897.
- Dynamite:** Alfred B. Nobel, 1862.
- Dynamo:** Michael Faraday, 1831.
- Dynamo, industrial:** Zénobe Gramme, 1872.
- Electromagnet:** William Sturgeon, 1823.
- Electroplating:** Luigi Brugnatelli, 1805.
- Elevator, passenger:** Elisha G. Otis, 1857.
- Elevator safety device:** Elisha G. Otis, 1852.
- Engine, high-speed internal-combustion:** Gottlieb Daimler, 1885.
- Filament, tungsten:** Irving Langmuir, 1915.
- Flying shuttle:** John Kay, 1733.
- Food preservation, hermetically sealed:** François Appert, 1804.
- Fountain pen:** Lewis E. Waterman, 1884. (First successful one.)
- Frequency modulation (FM):** Edwin H. Armstrong, 1933.
- Guncotton:** Christian Schönbein, 1845.
- Gyrocompass:** Elmer A. Sperry, 1905.
- Gyroscope:** Léon Foucault, 1852.
- Helicopter:** Louis C. Bréguet, 1909.
- Hydroplane:** Glenn H. Curtiss, 1911.
- Lamp, electric incandescent:** (Inventor uncertain; Thomas A. Edison, who made a lamp in 1879, is sometimes credited.)
- Lens, bifocal:** Benjamin Franklin, c.1760.
- Lightning rod:** Benjamin Franklin, 1752.
- Linotype machine:** Ottmar Mergenthaler, 1884.
- Lithography:** Aloys Senefelder, 1796.
- Machine gun:** Richard J. Gatling, 1861.
- Match, friction:** John Walker, 1827.
- Mercury-vapor lamp:** Peter C. Hewitt, 1912.
- Microscope, compound:** Zacharias Janssen, 1590.
- Microscope, electron:** Vladimir Zworykin et al., 1939.
- Miner's safety lamp:** Sir Humphry Davy, 1815.
- Monotype machine:** Tolbert Lanston, 1887.
- Motion pictures:** Thomas A. Edison, 1893.
- Motion pictures, sound:** (Product of various inventions. First picture with synchronized musical score: *Don Juan*, Warner Bros., 1926. First picture with spoken dialogue: *The Jazz Singer*, Warner Bros., 1927.)
- Motor, A-C:** Nikola Tesla, 1892.
- Ophthalmoscope:** Hermann von Helmholtz, 1851.
- Phonograph:** Thomas A. Edison, 1877.
- Photography, color:** Gabriel Lippmann, 1891.
- Power loom:** Edmund Cartwright, 1785.
- Printing, movable-type:** Johann Gutenberg (?), c.1440.
- Printing press, rotary:** Richard Hoe, 1847.
- Radio:** (Product of various inventions. First practical system of wireless telegraphy: Guglielmo Marconi, 1895.)
- Radio telephone:** Lee De Forest, 1906.
- Radio tube, diode:** Sir John Ambrose Fleming, 1904.
- Radio tube, triode:** Lee De Forest, 1906.
- Rayon:** Sir Joseph Swan, 1883.
- Reaper:** Cyrus McCormick, 1834.
- Revolver:** Samuel Colt, 1835.
- Rifle, automatic:** John M. Browning, 1918.
- Rubber, vulcanized:** Ch. Goodyear, 1839.
- Screw propeller:** John Ericsson, 1837.
- Self-starter, automobile:** Charles F. Kettering, 1911.
- Sewing machine:** Elias Howe, 1846.
- Spinning frame:** Sir Richard Arkwright, 1769.
- Spinning jenny:** James Hargreaves, 1764.
- Spinning mule:** Samuel Crompton, 1779.
- Steamboat:** Robert Fulton, 1807. (First commercially successful one in U. S.)
- Steam engine:** James Watt, 1765. (First practical one.)
- Tank, military:** Sir Ernest Swinton, 1914.

Telegraph, electromagnetic recording: Samuel F. B. Morse, 1837.

Telephone: Alexander Graham Bell, 1876.

Telescope: Hans Lippershey (?), c.1608.

Television: (Product of various inventions since 1920s and before. First commercial TV: July 1, 1941, over WNBT, New York.)

Thermometer: Galileo Galilei, 1593.

Tire, pneumatic: John B. Dunlop, 1888.

Tractor, caterpillar: Benjamin Holt, 1900.

Transformer, electric: William Stanley, 1885.

Typewriter: Christopher Sholes, 1868. (First practical one.)

Zeppelin: Count Ferdinand von Zeppelin, 1900.

### Discoveries and Theories

Adrenaline, isolation of: Jokichi Takamine, 1901.

Aluminum manufacture by electrolytic action: Charles M. Hall, 1886.

Antitoxin, diphtheria: Emil von Behring, 1890.

Atom smashing with slow neutrons: Enrico Fermi, 1934. (Experiment repeated by Lise Meitner and Otto Hahn in 1938.)

Atomic numbers: Henry Moseley, 1913.

Atomic theory: John Dalton, 1803.

Aureomycin: Benjamin M. Duggar, 1948.

Bacteria: Anton van Leeuwenhoek, 1675.

Blood, circulation of: William Harvey, 1628.

Classification of plants and animals: Carolus Linnaeus, 1737-53.

Combustion, nature of: Antoine Lavoisier, 1777.

Conditioned reflex: Ivan Pavlov, c.1910.

Deuterium (heavy hydrogen): Harold C. Urey, 1932.

Displacement of water, principle of: Archimedes, 3rd century B.C.

Electromagnetic waves: Heinrich Hertz, 1886.

Electron: Sir Joseph J. Thomson, 1897.

Electron, wave nature of: Louis Victor de Broglie, 1924.

Ether, first used as anesthetic: Crawford W. Long, 1842.

Evolution by natural selection: Charles Darwin, 1859.

Falling bodies, law of: Galileo Galilei, 1590.

Gases, laws governing: Joseph Gay-Lussac, 1809.

Gravitation, law of: Sir Isaac Newton, 1687.

Helium on sun: Sir Joseph Lockyer, 1868.

Heredity, laws of: Gregor Mendel, 1865.

Induction, electric: Joseph Henry, 1828.

Insulin: Sir Frederick G. Banting and J. J. R. MacLeod, 1922.

Intelligence testing, modern: Alfred Binet and Theodore Simon, 1905.

Isotopes, mass spectra of: Francis W. Aston, 1919.

Isotopes, theory of: Frederick Soddy, 1912.

Light, electromagnetic theory of: James Clerk Maxwell, 1873.

Light, velocity of: Olaus Römer, 1675.

Molecular hypothesis: Amadeo Avogadro, 1811.

Neutron: James Chadwick, 1932.

Ohm's Law: Georg S. Ohm, 1827.

Ozone: Christian Schönbein, 1839.

Penicillin: Sir Alexander Fleming, 1929.

Periodic table: Dmitri Mendeleev, 1869.

Positron: Carl D. Anderson, 1932.

Proton: Ernest Rutherford, 1919.

Psychoanalysis: Sigmund Freud, c.1904.

Quantum mechanics: Werner Heisenberg, 1925.

Quantum theory: Max von Planck, 1901.

Rabies preventive: Louis Pasteur, 1885.

Radioactivity: Antoine Becquerel, 1896.

Radioactivity, artificial: Frédéric and Irène Joliot-Curie, 1934.

Relativity, theories of: Albert Einstein, 1905-53.

Schick test of susceptibility to diphtheria: Béla Schick, 1913.

Secretin, isolation of: Sir William Bayliss and Ernest Starling, 1902.

Soda manufacture from salt: Ernest Solvay, 1861.

Solar system, heliocentricity of: Nicolaus Copernicus, 1530. (Also Aristarchus of Samos, 3rd century B.C.)

Spectrum analysis: Robert Bunsen and Gustav Kirchhoff, 1859.

Sulfa drugs as bactericides: Gerhard Domagk, 1932.

Surgery, antiseptic: Sir Joseph Lister, 1867.

Tuberculosis bacillus: Robert Koch, 1882.

Vaccination: Edward Jenner, 1796.

Virus, crystallized: Wendell M. Stanley, 1935.

Vitamin A: Elmer V. McCollum, 1912-14.

Vitamin B: Elmer V. McCollum, 1915-16.

Vitamin C: A. Holst, 1912.

Vitamin D: Elmer V. McCollum, 1922.

Vitamin D, irradiated: Harry Steenbock, 1924.

Wassermann test for syphilis: August von Wassermann, 1906.

Water, synthesis of: Henry Cavendish, 1781.

Wilson Cloud Chamber: Charles T. R. Wilson, 1911.

X-rays: Wilhelm Roentgen, 1895.

## The Races of Mankind

by PROFESSOR WILTON MARION KROGMAN  
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Classification of Man into groups called "races" rests upon the basic fact that all peoples belong to the same genus and species, *Homo sapiens*. This is important to keep in mind, for it implies that all peoples are much more alike than different.

Scientists classify Man by using a number of physical traits, most of them based upon observation rather than upon precise measurement (blood-groups are an exception). Examples of these are stature and head-form (determined by a breadth/length ratio), skin color, hair color, form and texture, eye color, nose shape, mouth form, shape of face with special reference to cheekbones. Other criteria, such as arm and leg proportions, are more specialized. Two things are noteworthy: (1) most physical traits are external; (2) physical traits are so variable that a single trait has virtually no diagnostic value.

We may define a *race* as a sub-group of Mankind more or less set apart by a heritable combination of physical traits.

There are three, possibly four, great aggregates of races, usually called *stocks*: Caucasoid, Mongoloid, Negroid, and Archaic Caucasoid (or Australoid). The first three are often referred to as "White," "Yellow," and "Black." This is not really correct; peoples of North-Central India are Caucasoids, yet their skin color is brown to dark brown; certain tribes of Northeast Africa are Negroids, yet their skin color is light brown to brown. Variability also may be seen in stature: the tallest people in the world are found in Denmark and the Scottish Highlands, in East Africa, and in southernmost South America—respectively Caucasoid, Negroid, and Mongoloid. It must be re-emphasized that not one or two traits, but an aggregate of traits, of genetic origin, provides the only valid method of setting up stock or racial classification.

Caucasoids are the peoples of Europe, the adjacent shores of North Africa, and of Asia Minor and the northern half of India. The following races belong to the Caucasoid stock: Nordic, or Northwest European, Alpine or Central European, Mediterranean or Southwest European, Baltic or Northeast European, Danic or Southeast European, Armenoid in western Asia Minor, and Indic (often called Hindu) in North-Central India. These races are not, of course, absolutely limited to those geographical areas. For example, the Mediterranean race is found also in North Africa, especially Egypt, and in Asia Minor, where it is represented by the Bedouin Arabs of Arabia. Other Caucasoid peoples are the Magyars, the Finns, and the Lapps, who show traces of Mongoloid mixtures, especially the last.

The Negroids are the peoples of Africa and Oceania, termed respectively the African Negroids and the Oceanic Negroids. The following African Negroid races are commonly recognized: Forest or West African or "True" Negro in West Africa, Sudanic in Central Africa, Nilotic in East Africa, Hamitic in Northeast and North Africa, Bantu (better: Bantu-speaking) in South Africa, and Bushman-Hottentot in the Kalahari Desert of South Africa. The Oceanic Negroids are commonly called Melanesian or Papuan, and are found chiefly in Borneo, New Caledonia, the Solomons, the Hebrides and Fiji.

Of special interest among Negroids are Pygmies, who average about four feet in stature. They are found in Africa in the Congo region, in the Ituri Forest, and in Oceania on the Andaman Islands, the Malay Peninsula, the Philippines, and Borneo.

The Mongoloids are basically the peoples of Asia, but are also in the Western Hemisphere as the American Indians, and are represented in Malaysia and in Oceania. The Mongoloids are usually divided into the following races: Sinic of China and Japan, Palearctic of Siberia, Turkic and Tungic or Mongolic of Central Asia, and Malayan of Malaysia. In the Western Hemisphere they are found as Eskimos and the Indians of the Americas. In Polynesia, i.e., in Samoa, Tonga, Hawaii and west to Easter Island, the Mongoloid stock is a basic element, with some Caucasoid and some Negroid (Melanesian?) admixture.

The Archaic Caucasoids are found in Australia as the Australian aborigines and in Japan as the Ainu. They may possibly be an element in Melanesia and in Ceylon and South India, e.g., the Toda, the Veddā, and other tribes.

This is a brief survey of the "stocks" and "races" of the world. There is much intermixing and some overlapping. This leads to two very important biological observations: (1) *there are no pure races*; (2) *there are no superior or inferior races*. We know from history that all peoples, upon contact, have crossed their genetically based physical traits. We know from human anatomy that in fundamental structure all peoples are identical.

As far as biological Man is concerned, what he is, is related to his cultural environment, rather than to any innate (or inherited) ability or aptitude. There is no "German race," only a German nationality; there is no "Jewish race," only a Jewish socio-religious community; there is no "Aryan race," only an Aryan language; there is no "master race," only a political bombast!



# RELIGION



## Principal Religions of the World

Source: *Encyclopædia Britannica*.

Statistics of the world's religions are only very rough approximations. Aside from Christianity, few religions, if any, attempt to keep statistical records; and even Protestants and Catholics employ different methods of counting members. All persons of whatever age who have received baptism in the Catholic Church are counted as members, while in most Protestant Churches only those who "join" the church are numbered. The compiling of statistics is further complicated by the fact that in China one may be at the same time a Confucian, a Taoist and a Buddhist. In Japan, one may be both a Buddhist and a Shintoist.

Religion	North America	South America	Europe	Asia <sup>1</sup>	Africa	Oceania <sup>2</sup>	Total
Christian—Total.....	128,467,527	91,677,138	441,383,109	25,374,305	28,911,430	26,171,973	741,985,482
Roman Catholic.....	74,561,995	89,412,040	215,363,295	8,857,842	14,194,448	18,951,281	421,340,901
Eastern Orthodox.....	1,208,157	.....	112,447,669	8,106,071	5,868,089	.....	127,629,986
Protestant.....	52,697,375	2,265,098	113,572,145	8,410,392	8,848,893	7,220,692	193,014,595
Jewish <sup>3</sup> .....	5,185,000	597,850	3,505,800 <sup>4</sup>	1,247,200	723,500	44,000	11,303,350
Mohammedan.....	32,600	139,156	3,866,000	251,227,347	60,359,000	75,000	315,699,103
Zoroastrian.....	.....	.....	.....	124,890	.....	.....	124,890
Shinto.....	.....	.....	.....	25,000,000	.....	.....	25,000,000
Taoist.....	15,000	17,000	12,000	50,000,000	1,200	8,000	50,053,200
Confucian.....	85,000	95,000	50,000	300,000,000	7,500	52,000	300,289,500
Buddhist.....	165,000	135,000	.....	150,000,000	.....	.....	150,300,000
Hindu.....	10,000	275,000	.....	255,030,506	300,000	100,000	255,715,506
Primitive.....	50,000	1,000,000	.....	45,000,000	75,000,000	100,000	121,150,000
Others or none.....	76,540,873	9,803,856	82,491,091	160,559,752	12,639,370	5,363,027	347,397,969
Grand Total.....	210,551,000	103,740,000	531,308,000	1,263,564,000	177,942,000	31,914,000	2,319,019,000

<sup>1</sup> Includes Indonesia, but not Philippines. <sup>2</sup> Includes Philippines. <sup>3</sup> Includes all Jews, whether or not members of a synagogue. <sup>4</sup> Includes Asiatic U.S.S.R. and Turkey.

## History of Leading Religious Groups in the United States

(50,000 members or over)

Source: *Yearbook of American Churches*.

### Baptist

**American Baptist Association.**—A group of Independent Missionary Baptist Churches, mainly in the South, Southwest and Southeast, organized into an association in 1905. Members (1951): 286,691.

**American Baptist Convention.**—The early historical local independency of Baptist churches in America tended to impede the formation of any general organization until in 1814 a General Missionary Convention was formed to permit Baptists to express themselves in terms of missionary activities. In 1845, the state conventions in the South withdrew to organize the Southern Baptist Convention. In 1907, the Northern Baptist Convention was organized, a delegated body under whose direction the many agencies of the Baptists in the North and West now operate. In May, 1950, the name was changed to the American Baptist Convention. Members (1952): 1,557,816.

**Free Will Baptists.**—A body of Arminian Baptists, organized in 1787 by Benjamin Randall in New Hampshire. Members (1953): 425,000.

**General Baptists.**—An Arminian group of Baptists, organized in 1607 and transplanted to the Colonies in 1714. It died down in the East but was revived in the Midwest in 1823 under Rev. Benoni Stinson. Members (1953): 52,382.

**National Baptist Convention, U. S. A., Inc.**—The older and parent convention of Negro Baptists. This body is to be distinguished from the National Baptist Convention of America, usually referred to as the "unincorporated" body. Members (1953): 4,526,847.

**National Baptist Convention of America.**—This is a body usually referred to as the "unincorporated" convention, not to be confused with the "incorporated" National Baptist Convention, U. S. A., Inc., from which this body withdrew. Organized in 1895. Members (1953): 2,606,510.

**National Baptist Evangelical Life and Soul Saving Assembly of U. S. A.**—Organized in 1921 by A. A. Banks, Sr., as a charitable, educational, and evangelical organization. Members (1951): 57,674.

**National Primitive Baptist Convention of the U. S. A.**—A group of Negro Baptists

opposed to all forms of church organization. Members (1952): 80,000.

**North American Baptist Association.**—Organized 1950 in Little Rock, Ark., as the result of a division in the American Baptist Association. In theology these churches are militantly fundamentalist. Members (1953): 160,000.

**Primitive Baptists.**—A large group of Baptists, largely through the South, who are opposed to all centralization, to modern missionary societies, and to Sunday schools. They are sometimes called "anti-missionary" Baptists. Members (1950): 72,000.

**Southern Baptist Convention.**—In 1845, Southern Baptists withdrew from the General Missionary Convention over the question of slavery and other matters and formed the Southern Baptist Convention. Members (1953): 7,883,708.

**The United Free Will Baptist Church.**—A body which set up its organization in 1901. Though ecclesiastically distinct, they are in close relations with the Free Will Baptists. Members (1952): 100,000.

### Catholic and Orthodox

**Armenian Apostolic Orthodox Church of America.**—The American branch of the Ancient Church of Armenia. Established in the U. S. in 1889. Diocesan organization under the jurisdiction of the Holy See of Etchmiadzin, Armenia, U.S.S.R. Members (1951): 130,000.

**The American Carpatho-Russian Orthodox Greek Catholic Church.**—This church is a self-governing diocese in communion with the Ecumenical Patriarchate of Constantinople. On Sept. 19, 1938, the late Patriarch Benjamin I canonized the diocese in the name of the Orthodox Church of Christ. Members (1953): 75,000.

**Greek Archdiocese of North and South America.**—Greek-speaking Orthodox Christians have had parishes in the U. S. for the last seventy years. These were first under the jurisdiction of the Metropolitan of Athens and later under the Patriarchate of Constantinople. Political changes in Europe have been reflected in this country and have brought difficulties in all branches of the Orthodox Church. In 1931, a general convention held in New York City under the presidency of Archbishop Athenagoras brought a large measure of unity and order. Members (1953): 1,000,000.

**North American Old Roman Catholic Church.**—This body is identical with the Roman Catholic Church in worship, faith, etc., but differs in discipline. It was received into union with the Eastern Orthodox Church by the Archbishop of Beirut in 1911 and by the Orthodox Patriarch of Alexandria in 1912. Members (1953): 85,500.

**Polish National Catholic Church of America.**—After long dissatisfaction with Ro-

man Catholic Administration in many Polish parishes, this group was organized in 1904. Members (1951): 265,879.

**The Roman Catholic Church.**—The largest single group of Christians in the U. S., the Roman Catholic Church is under the spiritual leadership of Pope Pius XII. This group dates back to the priests who accompanied Columbus on his second voyage to the New World. A settlement, later discontinued, was made at St. Augustine, Fla. The continuous history of this Church in the colonies began at St. Mary's in 1634, in Maryland. Members (1953): 31,476,261.

**Rumanian Orthodox Episcopate of America.**—This body of Eastern Orthodox Christians of Rumanian descent is under the spiritual supervision and canonical jurisdiction of the Bishop of the Rumanian Orthodox Church of North and South America. Members (1953): 50,000.

**The Russian Orthodox Church Outside Russia.**—Organized in 1920 to unite the missions and parishes of the Russian Orthodox Church outside of Russia. Members (1951): 55,000.

**The Russian Orthodox Greek Catholic Church of North America.**—The Russian Orthodox Catholic Church entered Alaska in 1792. In 1872, its headquarters were moved from Sitka to San Francisco and, in 1905, to New York. It administers churches in the U. S., Canada, Alaska, Aleutian Is., South America and Japan. Members (1953): 440,000.

**Serbian Eastern Orthodox Church.**—This body of the Eastern Orthodox Church has its own diocese and is under jurisdiction of the Serbian Patriarchate (Yugoslavia). Members (1953): 100,000.

**Syrian Antiochian Orthodox Church.**—This body is a division of the Orthodox Church which is under the jurisdiction of the Patriarch of Antioch. It is a member of the Federation of Orthodox Greek Catholic Churches in America. Members (1953): 100,000.

**Ukrainian Orthodox Church of U.S.A.**—This church was organized in the U. S. in 1919. Members (1953): 71,000.

### U. S. Church Membership, 1953

*Source: Yearbook of American Churches.*

Religious group	Members
Buddhist.....	63,000
Old Catholic and Polish National Catholic.....	366,088
Eastern Churches.....	2,100,171
Judaism.....	5,000,000
Roman Catholic.....	31,476,261
Protestant.....	55,837,325
Total.....	94,842,845

NOTE: Compiled from figures furnished by 255 of the 268 religious bodies in the U. S.

## Lutheran

**American Lutheran Church.**—This Church is a constituent body of the American Lutheran Conference. It is itself the result of the merger in 1930 of the Evangelical Lutheran Joint Synod of Ohio and Other States (org. 1918), the Evangelical Lutheran Synod of Iowa and Other States (org. 1854), and the Lutheran Synod of Buffalo (org. 1845). Members (1952): 767,261.

**Augustana Evangelical Lutheran Church.**—This group, whose constituency originally was of Swedish extraction, is a member of the American Lutheran Conference and is also a participating body in the National Lutheran Council. Organized in 1860. Members (1953): 493,085.

**Evangelical Lutheran Church.**—In 1917 the United Norwegian Church, the Norwegian Synod and the Hauge Synod united under the name, Norwegian Lutheran Church of America. In 1930 this group became a constituent part of the American Lutheran Conference. The new name, The Evangelical Lutheran Church, was adopted at its General Convention in 1946. Members (1952): 888,634.

**The Evangelical Lutheran Joint Synod of Wisconsin and Other States.**—This group, a constituent part of the Synodical Conference, was organized in Wisconsin in 1850. Members (1952): 316,839.

**Lutheran Church—Missouri Synod.**—This group, the largest constituent part of the Synodical Conference, was organized in 1847, holds to an unwavering confessionalism and is the leader in the conservative group among the Lutherans. Members (1953): 1,850,100.

**Lutheran Free Church.**—This body was organized in 1897 as the result of differences of opinion in the United Norwegian Church over control of the Augsburg Seminary. It became a constituent part of the American Lutheran Conference in 1930. Members (1953): 65,904.

**United Lutheran Church in America.**—This group dates back to the Ministerium of Pennsylvania, organized in 1748, and beyond that to early colonial days. It represents the union of the General Synod, General Council, and United Synod of the South in 1918. Members (1953): 2,061,004.

## Methodist

**African Methodist Episcopal Church.**—This group was formed in Philadelphia in 1816 and extended throughout the South after the Civil War. Members (1951): 1,166,301.

**African Methodist Episcopal Zion Church.**—This group was organized in 1796, coming out of the John Street Methodist Church, New York. Members (1952): 760,153.

**Colored Methodist Episcopal Church.**—In 1870, the General Conference of the M.E. Church, South, approved the request of its colored membership for the formation of their conferences into a separate body. Members (1951): 392,167.

**Free Methodist Church of North America.**—This body, organized in 1860, grew out of a movement in the Genesee Conference of the Methodist Episcopal Church towards a more original Methodism. Members (1953): 51,952.

**The Methodist Church.**—In April, 1939, the Uniting Conference forming The Methodist Church was held by representatives of the Methodist Episcopal Church, the Methodist Episcopal Church, South, and the Methodist Protestant Church. The Methodist Church in the United States originated with the efforts of John and Charles Wesley, leaders of the revival movement in England in the eighteenth century. Methodist emigrants from Ireland planted Methodism in America about 1760. In 1771 Francis Asbury, one of Wesley's preachers, later a Bishop, landed in Philadelphia. The Methodist Episcopal Church was organized in 1784-85. The Methodist Episcopal Church, South, dated from 1846, the separation from the Methodist Episcopal Church having taken place over the slavery issue. The Methodist Protestant Church dated from 1830, and was organized over the issue of lay representation. Members (1953): 9,151,524.

## Presbyterian

**Cumberland Presbyterian Church.**—In 1806, a presbytery (Cumberland) of the Presbyterian Church was dissolved by the Synod of Kentucky on account of its attitude toward revivalism. Members of the presbytery organized as an independent body in 1810 and became the Cumberland Presbyterian Church. When this body attempted to reunite with the Presbyterian Church in 1906, a minority preferred to continue as an independent church as above. Members (1953): 83,307.

**Presbyterian Church in the U. S.**—This group is the branch of the Presbyterian Church which separated from the main body at the time of the Civil War. It is often called the "Southern" Presbyterian Church. Members (1953): 756,866.

**Presbyterian Church in the United States of America.**—This group, distinguished by its representative form of government and its Calvinistic theology, appeared among the earliest colonists of America. Its first church was established about 1640. Members (1953): 2,492,504.

**United Presbyterian Church of North America.**—This group dates back to the Reformed Presbyterian (Covenanter) Church (1643) and the Associate Presbyterian (Seceder) Church (1733), both of Scotland.



These two groups appeared in America in 1774 and 1753 respectively. They united and became the Associate Reformed Presbyterian Church in 1782. A minority, however, continued as the Associate Presbyterian Church. In 1858 the two groups united and became the United Presbyterian Church. Members (1953): 228,718.

### Others

**Apostolic Overcoming Holy Church of God.**—A Negro body incorporated in Alabama in 1919. It is evangelistic in purpose and emphasizes sanctification, holiness and divine healing. Members (1951): 75,000.

**Assemblies of God.**—Independent, pentecostal, evangelical, missionary churches associated for co-operative effort in district and general councils. Organized in Arkansas in 1914. Members (1953): 370,118.

**Buddhist Churches of America.**—Organized in 1914 as the Buddhist Mission of North America, this group was incorporated in 1942 under the present name and represents Buddhism in this country, the faith based on "the anatman doctrine, supplemented by the idea of karma, and nirvana, the holy ease or a blissful mental state of absolute freedom from evil." Members (1953): 63,000.

**Christ Unity Science Church, Inc.**—Established in 1810, emphasizing Christian ontology and divine healing. Members (1953): 1,581,286.

**The Christian and Missionary Alliance.**—An evangelical, evangelistic and missionary movement organized in 1887. It stresses "the deeper Christian life and consecration to the Lord's service." Members (1952): 56,097.

**Christian Reformed Church.**—A group of Dutch Calvinists which dissented from the Reformed Church in America in 1857 and which was strengthened by later accessions from the same source and by immigration. Members (1953): 186,526.

**Church of Christ, Scientist.**—Founded by Mary Baker Eddy in 1879. As defined by Mrs. Eddy, Christian Science is the scientific system of divine healing and the reinstatement of primitive Christianity. Churches and societies (1953): 3,102.\*

**The Church of God.**—Inaugurated by Bishop A. J. Tomlinson, who served as General Overseer 1903-43. Episcopal in administration and Evangelical in doctrine. Members (1953): 66,293.

**Church of God (Anderson, Ind.).**—This group is one of the largest of the groups which have taken the name "Church of God." Its headquarters are at Anderson, Ind. It originated about 1880. Members (1953): 113,698.

**Church of God (Cleveland, Tenn.).**—This body, to be differentiated from the Church of God at Anderson, Ind., is a holiness group and pentecostal. It began in 1886 in Tennessee, under the name of Christian Union, reorganized in 1902 as the Holiness Church. In 1907 it adopted the name above. Members (1953): 131,623.

**Church of God in Christ.**—Organized in Arkansas in 1895, by C. P. Jones and C. H. Mason, who believed there was no salvation without holiness; incorporated 1897. Members (1953): 338,304.

**Church of Our Lord Jesus Christ of the Apostolic Faith, Inc.**—This church was founded by Bishop R. C. Lawson in Columbus, Ohio, and was moved to New York City in 1919. It is based upon the teachings of the Apostles and Prophets, Jesus Christ being its chief cornerstone. There are churches in 27 states. Members (1952): 50,000.

**Church of the Brethren (Conservative Dunkers).**—German pietists from Crefeld, Germany, under the leadership of Peter Becker, entered the colonies in 1719, and settled at Germantown, Philadelphia, Pa. They were called Dunkers (baptizers) and were immersionists. The members are conservative as to attire, oaths or affirmations, resistance to force, temperance, and the like. Members (1953): 190,263.

**Church of the Nazarene.**—One of the larger holiness bodies, organized in Pilot Point, Tex., Oct. 1908. It is in general accord with the early doctrines of Methodism and emphasizes entire sanctification. Members (1953): 249,749.

**Churches of Christ.**—This body is made up of a large group of churches, formerly reported with the Disciples of Christ, but since the religious census of 1906, reported separately. They are strictly congregational and have no organization larger than the local congregation. Members (1953): 1,500,000.

**Congregational Christian Churches.**—Congregational churches date back to the Pilgrim Fathers and the early colonists of New England in 1620. The Christian churches date back to the Wesleyan and revival movements at the end of the eighteenth century. These two groups of churches were merged at Seattle, Wash., in 1931. Members (1953): 1,283,754.

**Disciples of Christ.**—In the revival period of the early nineteenth century, a movement under Thomas Campbell and his son, Alexander, resulted in the establishment of a fellowship called Christians or Disciples. They believe that sects are unscriptural. Members (1953): 1,847,954.

**Evangelical and Reformed Church.**—This body was formed on June 26, 1934, at Cleveland, Ohio, by a union of the Evangelical Synod of North America and the Reformed Church in the United States.

\*Membership figure not available. The manual of the church forbids "the numbering of people and the reporting of such statistics for publication."

The union was unique in that it left all details to be adjusted afterwards. The constitution was declared in effect at the General Synod which met at Lancaster, Pa., in June, 1940. Members (1953): 761,335.

**Evangelical Mission Covenant Church of America.**—A transplantation to the U. S., in 1885, of a free-church movement in the Swedish state church. Until recently the name has been the Swedish Evangelical Mission Covenant. Members (1953): 52,085.

**The Evangelical United Brethren Church.**—This group had its origin in Johnstown, Pa., November 16, 1946, in the consummation of organic union between the Evangelical Church and the Church of the United Brethren in Christ. Both these former communions had their beginning in Pennsylvania in the evangelistic movement of the early 19th century. Jacob Albright was the founder of the Evangelical Church, and Dr. Philip William Otterbein was the founder of the United Brethren Church in 1800. Members (1953): 727,549.

**Federated Churches.**—Actually not a denomination but a group of local churches in various parts of the country, federated under the above name. Members (1936): 88,411.

**Friends, The Five Years Meeting of.**—The Five Years Meeting of Friends was formed in 1902 by 13 Yearly Meetings entering into a loose confederation. Since then, two of the original Yearly Meetings have withdrawn (Kansas and Oregon) and three Yearly Meetings outside the U. S. have joined. Members (1952): 69,419.

**Independent Fundamental Churches of America.**—Organized in 1930, at Cicero, Ill., by representatives of various independent churches. Members (1946): 65,000.

**International Church of the Foursquare Gospel.**—An evangelistic missionary body organized by Almee Semple McPherson in 1927. The parent church is Angelus Temple in Los Angeles. Members (1953): 81,590.

**Jewish Congregations.**—Jews arrived in the colonies before 1650. The first congregation is recorded in 1656, in New York City, the Shearith Israel (Remnant of Israel). Members (1953): 5,000,000.

**Latter-day Saints, Church of Jesus Christ of.**—A group in which the Bible, the Book of Mormon, the Doctrine and Covenants and the Pearl of Great Price are regarded as the word of God. The primitive church organization is sought and the same gifts of tongues, prophecy, revelation, visions, healings and interpretation of tongues are continued. Members (1952): 1,077,285.

**Latter-day Saints, Reorganized Church of Jesus Christ of.**—A division among the Latter-day Saints (Mormons) occurred on the death of Joseph Smith in 1844. His son, Joseph Smith, became presiding officer of

this group, which has headquarters at Independence, Mo. Members (1953): 131,781.

**Mennonite Church.**—The largest group of the Mennonites who began arriving in the U. S. in 1683, settling in Germantown, Pa. They derive their name from Menno Simons, born 1496. Members (1953): 63,016.

**Moravian Church (Unitas Fratrum).**—In 1735, Moravian missionaries of the pre-Reformation faith of John Hus came to Georgia and, in 1740, to Pennsylvania. They established the Moravian Church. Members (1953): 51,276.

**Pentecostal Assemblies of the World, Inc.**—A pentecostal holiness group originating in the early part of the century and found largely in the Midwest. Members (1951): 50,000.

**The Protestant Episcopal Church.**—This group entered the colonies with the earliest settlers as the Church of England. It became autonomous, adopted its present name in 1789. Members (1952): 2,550,831.

**Reformed Church in America.**—This group was established by the earliest Dutch settlers of New York as the Reformed Protestant Dutch Church in 1628. It embraces many of the historic early colonial churches of New York and New Jersey and today has many strong churches in the middle and far West. Members (1953): 197,616.

**The Salvation Army.**—An evangelistic organization, with a military government, first set up by General William Booth in England and introduced into the U. S. in 1880. Members (1953): 235,559.

**Seventh-day Adventists.**—This body developed out of the Adventist movement (1833-1844), which emphasized the imminent personal return of Jesus Christ. It emphasized the observance of the seventh-day Sabbath and in 1863 was numerous enough to organize a conference. Members (1953): 260,742.

**Spiritualists, International General Assembly of.**—Organized in Buffalo, N. Y., in 1936 to charter Spiritualist churches. Members (1952): 157,000.

**Unitarian Churches.**—The Unitarian movement in Congregationalism, beginning in the eighteenth century, produced the American Unitarian Association in 1825. In 1865 a national conference was organized. Members (1953): 86,129.

**United Pentecostal Church, Inc.**—Pentecostal Church, Inc., and Pentecostal Assemblies of Jesus Christ merged Sept 25, 1945, at St. Louis, Mo. Members (1952): 125,000.

**The Universalist Church of America.**—Originated in the U. S. about 1785. In 1866, it was incorporated as the Universalist General Convention; but in 1942, the present name was adopted. Members (1953): 73,194.



## Bishops of the Protestant Episcopal Church

Source: John H. Fitzgerald, Secretary, The House of Bishops, 7301 Ridge Blvd., Brooklyn 9, N. Y.

(Note: M—Missionary Bishop; C—Coadjutor; S—Suffragan)

Presiding Bishop: Henry K. Sherrill, New York City. Vice President of National Council: John B. Bentley, New York City.

- Alabama: Chas. C. J. Carpenter, George M. Murray (S), Birmingham.  
 Alaska: Wm. J. Gordon, Jr. (M), Fairbanks.  
 Albany (N. Y.): Frederick L. Barry, David E. Richards (S).  
 Arizona: Arthur B. Kinsolving, II (M), Phoenix.  
 Arkansas: R. Bland Mitchell, Little Rock.  
 Atlanta (Ga.): Randolph R. Claiborne.  
 Bethlehem (Pa.): Frederick J. Warnecke.  
 California: Karl M. Block, Henry H. Shires (S), San Francisco.  
 Central Brazil: Louis C. Melcher (M), Rio de Janeiro.  
 Central New York: Malcolm E. Peabody, Walter M. Higley (S), Syracuse.  
 Chicago: Gerald F. Burrill, Charles L. Street (S).  
 Colorado: Harold L. Bowen, Joseph S. Minnis (C), Denver.  
 Connecticut: Walter H. Gray, Robert McC. Hatch (S), Hartford.  
 Cuba: Alexander H. Blankingship (M), Havana.  
 Dallas (Tex.): C. Avery Mason, John J. M. Harte (S).  
 Delaware: Arthur R. McKinstry, Joseph B. Mosley, Jr. (C), Wilmington.  
 East Carolina: Thomas H. Wright, Wilmington, N. C.  
 Eastern Oregon: Lane W. Barton (M), Bend.  
 Easton (Md.): Allen J. Miller.  
 Eau Claire (Wis.): William W. Horstick.  
 Erie (Pa.): William Crittenden.  
 European Churches: Stephen E. Keeler, Minneapolis, Minn.  
 Florida: Frank A. Juhan, Hamilton West (C), Jacksonville.  
 Fond du Lac (Wis.): Harwood Sturtevant, William H. Brady (C).  
 Georgia: Middleton S. Barnwell, Albert R. Stuart (C), Savannah.  
 Haiti: C. A. Voegell (M), Port-au-Prince.  
 Harrisburg (Pa.): J. Thomas Heistand.  
 Honolulu: Harry S. Kennedy (M).  
 Idaho: Frank A. Rhea (M), Boise.  
 Indianapolis: Richard A. Kirchhofer.  
 Iowa: Gordon V. Smith, Des Moines.  
 Kansas: Goodrich R. Fenner, Topeka.  
 Kentucky: C. Gresham Marmion, Jr., Louisville.  
 Lexington (Ky.): William R. Moody.  
 Liberia: Bravid W. Harris (M), Monrovia.  
 Long Island: James P. DeWolfe, Jonathan G. Sherman (S), Garden City, N. Y.  
 Los Angeles: Francis E. I. Bloy, Donald J. Campbell (S).  
 Louisiana: Girault M. Jones, New Orleans; Iveson B. Noland (S), Alexandria.  
 Maine: Oliver L. Loring, Portland.  
 Maryland: Noble C. Powell, Baltimore.  
 Massachusetts: Norman B. Nash, Anson Phelps Stokes, Jr. (C), Boston.  
 Mexico: Efrain Salinas y Velasco (M), Mexico City.  
 Michigan: Richard S. M. Emrich, Archie H. Crowley (S), Detroit.  
 Milwaukee: Donald H. V. Hallock.  
 Minnesota: Stephen E. Keeler, Hamilton H. Kellogg (C), Minneapolis.  
 Mississippi: Duncan M. Gray, Jackson.  
 Missouri: Arthur C. Lichtenberger, St. Louis.  
 Montana: Henry H. Daniels, Helena.  
 Nebraska: Howard R. Brinker, Omaha.  
 Nevada: William F. Lewis (M), Reno.  
 New Hampshire: Charles F. Hall, Concord.  
 New Jersey: Wallace J. Gardner, Alfred L. Banyard (S), Trenton.  
 New Mexico and Southwest Texas: James M. Stoney, Charles J. Kinsolving III (C), Albuquerque, N. Mex.  
 New York: Horace W. B. Donegan, Charles F. Boynton (S), New York City.  
 Newark (N. J.): Benjamin M. Washburn, Leland W. F. Stark (C).  
 North Carolina: Edwin A. Penick, Raleigh; Richard H. Baker (C), Greensboro.  
 North Dakota: Richard Emery, Fargo.  
 North Texas: George H. Quarterman (M), Amarillo.  
 Northern Indiana: Reginald Mallett, South Bend.  
 Northern Michigan: Herman R. Page, Marquette.  
 Ohio: Nelson M. Burroughs, Cleveland.  
 Oklahoma: Chilton Powell, Oklahoma City.  
 Olympia (Wash.): Stephen F. Bayne, Jr., Seattle.  
 Oregon: Benjamin D. Dagwell, Portland.  
 Panama Canal Zone: Reginald H. Gooden (M), Ancon.  
 Pennsylvania: Oliver J. Hart, Joseph G. Armstrong (S), Philadelphia.  
 Philippines: Norman S. Binsted (M), Lyman C. Ogilby (S), Manila; Robert F. Wilner (S), Bontoc.  
 Pittsburgh: Austin Pardue, William S. Thomas (S).  
 Puerto Rico: Albert E. Swift, San Turce.  
 Quincy (Ill.): William L. Essex, Peoria.  
 Rhode Island: Granville G. Bennett, John S. Higgins (C), Providence.  
 Rochester (N. Y.): Dudley S. Stark.  
 Sacramento (Calif.): A. W. Noel Porter.  
 Salina (Kans.): Shirley H. Nichols (M).  
 San Joaquin (Calif.): Sumner F. D. Walters (M), Stockton.  
 South Carolina: Thomas N. Carruthers, Charleston.



South Dakota: Conrad H. Gesner (M),  
Sioux Falls.  
South Florida: Henry I. Louttit, Martin J.  
Bram (S), Orlando.  
Southern Brazil: Athalicio T. Pithan (M),  
Porto Alegre.  
Southern Ohio: Henry W. Hobson, Cin-  
cinnati.  
Southern Virginia: George P. Gunn, Nor-  
folk.  
Southwestern Brazil: Egmont M. Krischke  
(M), Santa Maria.  
Southwestern Virginia: William H. Mar-  
mion, Roanoke.  
Spokane (Wash.): Russell S. Hubbard (M).  
Springfield (Ill.): Charles A. Clough.  
Tennessee: Theodore N. Barth, Memphis.  
Texas: Clinton S. Quin, Houston; John E.  
Hines (C), Austin.  
Upper Carolina: Clarence A. Cole; Colum-  
bia, S. C.

Utah: Richard S. Watson, Salt Lake City.  
Vermont: Vedder Van Dyck, Burlington.  
Virginia: Frederick D. Goodwin, Robert F.  
Gibson (S), Richmond.  
Washington (D. C.): Angus Dun.  
West Missouri: Edward R. Welles, Grand-  
view.  
West Texas: Everett H. Jones, San Antonio.  
West Virginia: Robert E. L. Strider, Wheel-  
ing; Wilburn C. Campbell (C), Charles-  
ton.  
Western Carolina: M. George Henry, Ashe-  
ville, N. C.  
Western Massachusetts: William A. Law-  
rence, Springfield.  
Western Michigan: Dudley B. McNeil,  
Grand Rapids.  
Western New York: Lauriston L. Scaife,  
Buffalo.  
Wyoming: James W. Hunter, Laramie.

## Bishops of The Methodist Church

Source: Methodist Information, New York City.

Raymond L. Archer; Singapore, Malaya.  
Sante Uberto Barbieri; Buenos Aires, Ar-  
gentina.  
Newell S. Booth; Elisabethville, Bel. Congo.  
J. W. E. Bowen; Atlanta, Ga.  
John W. Branscomb; Jacksonville, Fla.  
Charles W. Brashares; Chicago, Ill.  
Matthew W. Clair, Jr.; St. Louis, Mo.  
D. Stanley Coors; St. Paul, Minn.  
Fred P. Corson; Philadelphia, Pa.  
Dana Dawson; Topeka, Kans.  
F. Gerald Ensley; Des Moines, Iowa.  
Marvin A. Franklin; Jackson, Miss.  
Paul N. Garber; Richmond, Va.  
A. Raymond Grant; Portland, Oreg.  
Odd Hagen; Stockholm, Sweden.  
Costen J. Harrell; Charlotte, N. C.  
Ivan Lee Holt; St. Louis, Mo.  
Gerald H. Kennedy; Los Angeles, Calif.  
Willis J. King; New Orleans, La.  
W. Earl Ledden; Syracuse, N. Y.  
John Wesley Lord; Boston, Mass.  
Edgar A. Love; Baltimore, Md.  
Paul E. Martin; Little Rock, Ark.  
William C. Martin; Dallas, Tex.

Shot K. Mondol; Hyderabad, India.  
Arthur J. Moore; Atlanta, Ga.  
Frederick B. Newell; New York, N. Y.  
H. Clifford Northcott; Madison, Wis.  
G. Bromley Oxnam; Washington, D. C.  
Glenn R. Phillips; Denver, Colo.  
J. Waskom Pickett; Delhi, India.  
Clare Purcell; Birmingham, Ala.  
Richard C. Raines; Indianapolis, Ind.  
Marshall R. Reed; Detroit, Mich.  
Clement D. Rokey; Lucknow, India.  
Julio Manuel Sabanes; Santiago, Chile.  
Roy H. Short; Nashville, Tenn.  
A. Frank Smith; Houston, Tex.  
W. Angie Smith; Oklahoma City, Okla.  
John A. Subhan; Bombay, India.  
Donald H. Tippet; San Francisco, Calif.  
José Valencia; Manila, Philippines.  
Edwin E. Voigt; Aberdeen, S. Dak.  
Ralph A. Ward; Hong Kong.  
William T. Watkins; Louisville, Ky.  
H. Bascom Watts; Lincoln, Nebr.  
Hazen G. Werner; Columbus, Ohio.  
Lloyd C. Wicke; Pittsburgh, Pa.  
Friedrich Wunderlich; Frankfurt, Germany.

## Roman Catholic Hierarchy of the U. S.

Source: National Catholic Welfare Conference, Washington, D. C.

(Note: A—Auxiliary; C—Coadjutor. Archbishops are shown in boldface type, Bishops in lightface. An Archbishop heading a diocese is called an "Archbishop *ad Personam*"; i.e., he bears the personal title of Archbishop. The Apostolic Delegate to the U. S. is Archbishop Amleto Giovanni Cicognani.)

### Archdioceses

Baltimore, Md.: Francis P. Keough; Jerome  
D. Sebastian (A).  
Boston, Mass.: Richard J. Cushing; Eric F.  
MacKenzie (A); Jeremiah E. Minihan  
(A).  
Chicago, Ill.: Samuel Cardinal Stritch;  
Bernard J. Sheil (A); Wm. D. O'Brien  
(A).  
Cincinnati, Ohio: Karl J. Alter; Clarence  
G. Isenmann (A).  
Denver, Colo.: Urban J. Vehr.

Detroit, Mich.: Edward Cardinal Mooney;  
Allen J. Babcock (A); A. M. Zaleski (A);  
H. E. Donnelly (A); J. A. Donovan (A).  
Dubuque, Iowa: Henry P. Rohlfman; Leo  
Binz (C); Loras T. Lane (A).  
Hartford, Conn.: Henry J. O'Brien; John F.  
Hackett (A).  
Indianapolis, Ind.: Paul C. Schulte.  
Kansas City, Kans.: Edward J. Hunkeler.  
Los Angeles, Calif.: James Francis Cardinal  
McIntyre; Joseph T. McGucken (A);  
Timothy Manning (A).

Louisville, Ky.: John A. Floersh.  
 Milwaukee, Wis.: Albert G. Meyer; Roman R. Atkielski (A).  
 Newark, N. J.: Thomas A. Boland; Justin J. McCarthy (A).  
 New Orleans, La.: Joseph F. Rummel; L. Abel Caillouet (A).  
 New York, N. Y.: Francis Cardinal Spellman; Stephen J. Donahue (A); Joseph P. Donahue (A); Joseph F. Flannelly (A); Fulton J. Sheen (A); Edward V. Dargin (A); Joseph P. Pernicone (A); Raymond A. Lane (A).  
 Omaha, Nebr.: Gerald T. Bergan.  
 Philadelphia, Pa.: John F. O'Hara, C.S.C.; Joseph G. McCormick (A); Joseph McShea (A).  
 Portland, Oreg.: Edward D. Howard.  
 St. Louis, Mo.: Joseph E. Ritter; Leo C. Byrne (A); Charles H. Helmsing (A).  
 St. Paul, Minn.: John G. Murray; James J. Byrne (A).  
 San Antonio, Tex.: Robert E. Lucey.  
 San Francisco, Calif.: John J. Mitty; Hugh A. Donohoe (A); Merlin J. Guilfoyle (A).  
 Santa Fe, N. Mex.: Edwin V. Byrne.  
 Seattle, Wash.: Thomas A. Connolly.  
 Washington, D. C.: Patrick A. O'Boyle; John M. McNamara (A); Brian J. McEntegart (A); Michael J. Keyes (A).

### Dioceses

Alaska (vicariate): Francis D. Gleeson, S.J., Vicar Apostolic.  
 Albany, N. Y.: Edmund F. Gibbons; William A. Scully (C).  
 Alexandria, La.: Charles P. Greco.  
 Altoona, Pa.: Richard T. Guilfoyle.  
 Amarillo, Tex.: Lawrence J. FitzSimon.  
 Austin, Tex.: Louis J. Reicher.  
 Bahamas (Vicariate): Paul L. Hagerty, O.S.B., Vicar Apostolic.  
 Baker City, Oreg.: Francis P. Leipzig.  
 Belleville, Ill.: Albert R. Zuroweste.  
 Bismarck, N. Dak.: Lambert A. Hoch.  
 Boise, Idaho: Edward J. Kelly.  
 Bridgeport, Conn.: Lawrence J. Shehan.  
 Brooklyn, N. Y.: Thomas E. Molloy; Raymond Kearney (A); J. J. Boardman (A).  
 Buffalo, N. Y.: Joseph A. Burke; Leo R. Smith (A).  
 Burlington, Vt.: E. F. Ryan; R. F. Joyce (A).  
 Camden, N. J.: Bartholomew J. Eustace.  
 Charleston, S. C.: John J. Russell.  
 Cheyenne, Wyo.: Hubert M. Newell.  
 Cleveland, Ohio: Edward F. Hoban; Floyd L. Begin (A); John J. Krol (A).  
 Columbus, Ohio: Michael J. Ready; Edward G. Hettinger (A).  
 Corpus Christi, Tex.: Mariano S. Garriga.  
 Covington, Ky.: William T. Mulloy.  
 Crookston, Minn.: Francis J. Schenk.  
 Dallas-Ft. Worth, Tex.: Joseph P. Lynch; Thomas K. Gorman (C); Augustine Dangelmayr (A).  
 Davenport, Iowa: Ralph L. Hayes.  
 Des Moines, Iowa: Edward C. Daly, O.P.

Dodge City, Kans.: John B. Franz.  
 Duluth, Minn.: Thomas A. Welch.  
 El Paso, Tex.: Sidney M. Metzger.  
 Erie, Pa.: John M. Gannon; Edward P. McManaman (A).  
 Evansville, Ind.: Henry J. Grimmelsman.  
 Fall River, Mass.: James L. Connolly.  
 Fargo, N. Dak.: Aloysius J. Muench; Leo F. Dworschak (A).  
 Fort Wayne, Ind.: John F. Noll; Leo A. Pursley (A).  
 Gallup, N. Mex.: Bernard T. Espelage, O.F.M.  
 Galveston, Tex.: Wendelin J. Nold.  
 Grand Island, Nebr.: John L. Paschang.  
 Grand Rapids, Mich.: Allen J. Babcock.  
 Great Falls, Mont.: William J. Condon.  
 Green Bay, Wis.: Stanislaus V. Bona; John B. Grellinger (A).  
 Greensburg, Pa.: Hugh L. Lamb.  
 Guam (vicariate): Apollinaris W. Baumgartner, O.F.M. Cap., Vicar Apostolic.  
 Harrisburg, Pa.: George L. Leech.  
 Helena, Mont.: Joseph M. Gilmore.  
 Honolulu: J. J. Sweeney; J. J. Scanlan (A).  
 Jamaica (Vicariate): John J. McEleney, S.J., Vicar Apostolic.  
 Joliet, Ill.: Martin D. McNamara.  
 Juneau, Alaska: Dermot O'Flanagan.  
 Kansas City, Mo.: Edwin V. O'Hara; Joseph Marling, C.F.P.S. (A).  
 La Crosse, Wis.: John P. Treacy.  
 Lafayette, Ind.: John G. Bennett.  
 Lafayette, La.: Jules B. Jeanmard; Maurice Schexnayder (A).  
 Lansing, Mich.: Joseph H. Albers.  
 Lincoln, Nebr.: Louis B. Kucera.  
 Little Rock, Ark.: Albert L. Fletcher.  
 Madison, Wis.: William P. O'Connor.  
 Manchester, N. H.: Matthew F. Brady.  
 Marquette, Mich.: Thomas L. Noa.  
 Mobile-Birmingham, Ala.: T. J. Toolen.  
 Monterey-Fresno, Calif.: Aloysius J. Willinger, C.Ss.R.  
 Nashville, Tenn.: William L. Adrian.  
 Natchez, Miss.: Richard O. Gerow.  
 Norwich, Conn.: Bernard J. Flanagan.  
 Ogdensburg, N. Y.: Walter P. Kellenberg.  
 Oklahoma City-Tulsa, Okla.: Eugene J. McGuinness.  
 Owensboro, Ky.: Francis R. Cotton.  
 Paterson, N. J.: James A. McNulty.  
 Peoria, Ill.: William E. Cousins.  
 Pittsburgh, Pa.: John F. Dearden; Coleman F. Carroll (A).  
 Ponce, P. R.: James E. McManus, C.Ss.R.  
 Portland, Maine: Joseph E. McCarthy; Daniel J. Feeney (C).  
 Providence, R. I.: Russell J. McVinney.  
 Pueblo, Colo.: Joseph C. Willging.  
 Raleigh, N. C.: Vincent S. Waters; James J. Navagh (A).  
 Rapid City, S. Dak.: William T. McCarty, C.Ss.R.  
 Reno, Nev.: Robert J. Dwyer.  
 Richmond, Va.: Peter L. Ireton; Joseph H. Hodges (A).

Rochester, N. Y.: James E. Kearney; Lawrence B. Casey (A).  
 Rockford, Ill.: Raymond P. Millinger.  
 Sacramento, Calif.: Robert J. Armstrong.  
 Saginaw, Mich.: Stephen S. Woznicki.  
 St. Augustine, Fla.: Joseph P. Hurley; Thomas J. McDonough (A).  
 St. Cloud, Minn.: Peter W. Bartholome.  
 St. Joseph, Mo.: Charles H. Le Blond; John P. Cody (C).  
 Salina, Kans.: Frank A. Thill.  
 Salt Lake City, Utah: Duane G. Hunt; J. Lennox Federal (A).  
 San Diego, Calif.: Charles F. Buddy.  
 San Juan, P. R.: James P. Davis.  
 Savannah-Atlanta, Ga.: Gerald P. O'Hara; Francis E. Hyland (A).  
 Scranton, Pa.: (Vacant); Henry T. Klonowski (A).  
 Sioux City, Iowa: Joseph M. Mueller.  
 Sioux Falls, S. Dak.: William O. Brady.  
 Spokane, Wash.: Charles D. White.  
 Springfield, Ill.: William A. O'Connor.  
 Springfield, Mass.: Christopher J. Weldon.  
 Steubenville, Ohio: John K. Mussio.

Superior, Wis.: Joseph J. Annabring.  
 Syracuse, N. Y.: Walter A. Foery; David F. Cunningham (A).  
 Toledo, Ohio: George J. Rehring.  
 Trenton, N. J.: George W. Ahr.  
 Tucson, Ariz.: Daniel J. Gercke; Francis J. Green (A).  
 Wheeling, W. Va.: John J. Swint; Thomas J. McDonnell (C).  
 Wichita, Kans.: Mark K. Carroll.  
 Wilmington, Del.: Edmond J. Fitzmaurice.  
 Winona, Minn.: Edward A. Fitzgerald.  
 Worcester, Mass.: John J. Wright.  
 Yakima, Wash.: Joseph P. Dougherty.  
 Youngstown, Ohio: Emmet M. Walsh.  
 Military Ordinariate: Francis Cardinal Spellman, Military Vicar; William Arnold, Military Delegate; James H. Griffiths, Chancellor.  
 Belmont, N. C. (Abbacy Nullius): Vincent G. Taylor, O.S.B. (Abbot).  
 Philadelphia, Pa. (Byzantine Rite): Constantine Bohachevsky; Ambrose A. Senyshyn, O.S.B.M. (A).  
 Pittsburgh, Pa. (Greek Rite): Daniel Ivancho.

## The College of Cardinals

### Cardinal Bishops

Year of creation	Name	Office or dignity	Nationality
1936	Eugene Tisserant	Bishop of Ostia, Porto, and Santa Rufina; Dean of the Sacred College of Cardinals; Secretary of the Sacred Congregation for the Oriental Church	French
1946	Clemente Micara	Bishop of Velletri; Vicar General of Rome	Italian
1937	Giuseppe Pizzardo	Bishop of Albano; Secretary of the Supreme Sacred Congregation of the Holy Office; Prefect of the Sacred Congregation of Seminaries and Universities; Grand Chancellor, Pontifical Gregorian University	Italian
1946	Benedetto Aloisi Masella	Bishop of Palestrina; Pro-Prefect of the Sacred Congregation of the Sacraments; Archpriest of St. John Lateran's Basilica	Italian
1937	Adeodato Giovanni Piazza, O. C. D.	Bishop of Sabina and Poggio Mirteto; Secretary of the Sacred Consistorial Congregation	Italian
1933	Federico Tedeschini	Bishop of Frascati; Archpriest of St. Peter's Basilica; Prefect of the Sacred Congregation of the Basilica of St. Peter; Apostolic Datary	Italian

### Cardinal Priests

1925	Alessandro Verde	Archpriest of Liberian Patriarchal Basilica of St. Mary Major	Italian
1927	Joseph Ernest Van Roey	Archbishop of Malines	Belgian
1927	Pedro Segura y Saenz	Archbishop of Sevilla	Spanish



1929	Emanuel Goncalves Cerejeira	Patriarch of Lisbon	Portuguese
1930	Achilles Lienart	Bishop of Lille	French
1933	Pietro Fumasoni-Biondi	Prefect of the Sacred Congregation for the Propagation of the Faith; Grand Chancellor of the Urban College "De Propaganda Fide"	Italian
1933	Maurilio Fossati	Archbishop of Turin	Italian
1933	Elia dalla Costa	Archbishop of Florence	Italian
1933	Theodore Innitzer	Archbishop of Vienna	Austrian
1935	Ignazio Tappouni	Syrian Patriarch of Antioch	Iraqian
1935	James Louis Copello	Archbishop of Buenos Aires	Argentine
1935	Domenico Jorio	Prefect of the Sacred Congregation of the Sacraments	Italian
1937	Pierre Marie Gerlier	Archbishop of Lyon	French
1946	Gregory Peter XV Agagianian	Patriarch of Cilicia of the Armenians	Trans-caucasian
1946	Edward Mooney	Archbishop of Detroit	American
1946	Jules Saliège	Archbishop of Toulouse	French
1946	James McGuigan	Archbishop of Toronto	Canadian
1946	Samuel A. Stritch	Archbishop of Chicago	American
1946	Emile Roques	Archbishop of Rennes	French
1946	Jon De Jong	Archbishop of Utrecht	Dutch
1946	Carlo Carmelo de Vasconcellos Mota	Archbishop of São Paulo	Brazilian
1946	Norman Gilroy	Archbishop of Sydney	Australian
1946	Francis J. Spellman	Archbishop of New York	American
1946	José María Caro Rodríguez	Archbishop of Santiago	Chilean
1946	Teodosio Clemente de Gouveia	Archbishop of Lourenço Marques, Mozambique	Portuguese
1946	Jaime de Barros Camara	Archbishop of Rio de Janeiro	Brazilian
1946	Enrique Pla y Deniel	Archbishop of Toledo and Primate of Spain	Spanish
1946	Manuel Arteaga y Betancourt	Archbishop of Havana	Cuban
1946	Joseph Frings	Archbishop of Cologne	German
1946	Juan Gualberto Guevara	Archbishop of Lima	Peruvian
1946	Bernard Griffin	Archbishop of Westminster	English
1946	Jozsef Mindszenty	Archbishop of Esztergom and Primate of Hungary	Hungarian
1946	Ernesto Ruffini	Archbishop of Palermo	Italian
1946	Antonio Caggiano	Bishop of Rosario	Argentine
1946	Thomas Tien, S. V. D.	Archbishop of Peking	Chinese
1953	Celso Costantini	Chancellor of the Holy Roman Church	Italian
1953	Augusto Alvaro da Silva	Archbishop of San Salvador in Bala	Brazilian
1953	Gaetano Cicognani	Prefect of Sacred Congregation of Rites	Italian
1953	Angelo G. Roncalli	Patriarch of Venice	Italian
1953	Valerio Valeri	Prefect of Sacred Congregation of Affairs of Religious	Italian
1953	Pietro Ciriaci	Prefect of Sacred Congregation of the Council	Italian
1953	Francesco Borgongini-Duca	Member of Sacred Consistorial Congregation	Italian
1953	Maurice Feltin	Archbishop of Paris	French

1953	Marcello Mimmi	Archbishop of Naples	Italian
1953	Carlos Maria de la Torre	Archbishop of Quito	Ecuadorian
1953	Aloysius Stepinac	Archbishop of Zagreb	Yugoslavian
1953	Georges F. X. M. Grente	Archbishop of Le Mans	French
1953	Giuseppe Siri	Archbishop of Genoa	Italian
1953	John F. D'Alton	Archbishop of Armagh, Primate of all Ireland	Irish
1953	James Francis McIntyre	Archbishop of Los Angeles	American
1953	Giacomo Lercaro	Archbishop of Bologna	Italian
1953	Stefan Wyszyński	Archbishop of Gniezno and Warsaw	Polish
1953	Benjamin de Arriba y Castro	Archbishop of Tarragona	Spanish
1953	Fernando Quiroga y Palacios	Archbishop of Santiago di Compostela	Spanish
1953	Paul Émile Leger, S.S.	Archbishop of Montreal	Canadian
1953	Crisanto Luque	Archbishop of Bogotá, Primate of Colombia	Colombian
1953	Valerian Gracias	Archbishop of Bombay	Indian
1953	Josef Wendel	Archbishop of Munich and Freising	German

#### Cardinal Deacons

1935	Nicola Canali	Grand Penitentiary; President of the Commission charged with the Administration of Vatican City	Italian
1936	Giovanni Mercati	Librarian and Archivist of the Holy Roman Church	Italian
1946	Giuseppe Bruno	Prefect of Supreme Tribunal of the Apostolic Signature; President Secretary of the Commission on the Authentic Interpretation of the Code of Canon Law	Italian
1953	Alfredo Ottaviani	Pro-Secretary of the Supreme Congregation of the Holy Office	Italian

#### Antipopes

Antipopes were those who falsely claimed Papal Sovereignty. The dates and, in some cases, Roman numerals after the names account for occasional discrepancies in the succession of the Popes.

Name	Birthplace	Access.	End of reign	Name	Birthplace	Access.	End of reign
St. Hippolytus	Rome	217	235	Clement III	Parma	1080	1100
Novatian	Rome	251	...	Theodoric	.....	....	1100
Felix II	Rome	355	365	Albert	.....	....	1102
Ursinus	.....	366	367	Sylvester IV	Rome	1105	1111
Eulalius	.....	418	419	Gregory VIII	France	1118	1121
Lawrence	.....	498	501	Celestine II	Rome	....	1124
Dioscorus	Alexandria	530	530	Anacletus II	Rome	1130	1138
Theodore	.....	...	687	Victor IV	.....	1138	1138
Paschal	.....	...	687	Victor IV*	Montecelio	1159	1164
Constantine	Nepi	767	769	Paschal III	.....	1164	1168
Philip	.....	768	768	Callistus III	Arezzo	1168	1178
John	.....	...	844	Innocent III	Sezze	1179	1180
Anastasius	.....	855	855	Nicholas V	Corvaro	1328	1330
Christopher	Rome	903	904	Clement VII	.....	1378	1394
Boniface VII	Rome	974	974	Benedict XIII	Aragon	1394	1423
Boniface VII (2nd time)	.....	984	985	Alexander V	Crete	1409	1410
John XVI	Rossano	997	998	John XXIII	Naples	1410	1415
Gregory	.....	...	1012	Felix V	.....	1439	1449
Benedict X	Rome	1058	1059				
Honorius II	Verona	1061	1072				

\* Did not recognize his predecessor of 1138, who, only two months after claiming the Papacy, submitted to the rightful Pope, Innocent III.

## Roman Catholic Pontiffs

*Source for Catholic information: The National Catholic Almanac.*

St. Peter, of Bethsaida in Galilee, Prince of the Apostles, was the first Pope. He resided first in Antioch and then for twenty-five years in Rome, where he suffered martyrdom in 64 or 67 of the modern era. He was followed by St. Linus.

Name	Birthplace	Access.	End of reign	Name	Birthplace	Access.	End of reign
St. Linus	Tuscia	67	76	Sabinianus	Tuscia	604	606
St. Anaclethus (Cletus)	Rome	76	88	Boniface III	Rome	607	607
St. Clement	Rome	88	97	St. Boniface IV	Marsi	608	615
St. Evaristus	Greece	97	105	St. Deusdedit (Adeodatus I)	Rome	615	618
St. Alexander I	Rome	105	115	Boniface V	Naples	619	625
St. Sixtus I	Rome	115	125	Honorius I	Campania	625	638
St. Telesphorus	Greece	125	136	Severinus	Rome	640	640
St. Hyginus	Greece	136	140	John IV	Dalmatia	640	642
St. Pius I	Aquileia	140	155	Theodore I	Greece	642	649
St. Anicetus	Syria	155	166	St. Martin I	Todi	649	655
St. Soter	Campania	166	175	St. Eugenius I	Rome	654	657
St. Eleutherius	Epirus	175	189	St. Vitalian	Segni	657	672
St. Victor I	Africa	189	199	Adeodatus II	Rome	672	676
St. Zephyrinus	Rome	199	217	Donus	Rome	676	678
St. Callistus I	Rome	217	222	St. Agatho	Sicily	678	681
St. Urban I	Rome	222	230	St. Leo II	Sicily	682	683
St. Pontian	Rome	230	235	St. Benedict II	Rome	684	685
St. Anterus	Greece	235	236	John V	Syria	685	686
St. Fabian	Rome	236	250	Conon	Unknown	686	687
St. Cornelius	Rome	251	253	St. Sergius I	Syria	687	701
St. Lucius I	Rome	253	254	John VI	Greece	701	705
St. Stephen I	Rome	254	257	John VII	Greece	705	707
St. Sixtus II	Greece	257	258	Sisinnius	Syria	708	708
St. Dionysius	Unknown	259	268	Constantine	Syria	708	715
St. Felix I	Rome	269	274	St. Gregory II	Rome	715	731
St. Eutychian	Luni	275	283	St. Gregory III	Syria	731	741
St. Calixtus	Dalmatia	283	296	St. Zachary	Greece	741	752
St. Marcellinus	Rome	296	304	Stephen II	Rome	752	752
St. Marcellus I	Rome	308	309	Stephen III	Rome	752	757
St. Eusebius	Greece	309	309	St. Paul I	Rome	757	767
St. Melchiades	Africa	311	314	Stephen IV	Sicily	768	772
St. Sylvester I	Rome	314	335	Adrian I	Rome	772	795
St. Marcus	Rome	336	336	St. Leo III	Rome	795	816
St. Julius I	Rome	337	352	Stephen V	Rome	816	817
St. Liberius	Rome	352	366	St. Paschal I	Rome	817	824
St. Damasus I	Spain	366	384	Eugenius II	Rome	824	827
St. Siricius	Rome	384	399	Valentine	Rome	827	827
St. Anastasius I	Rome	399	401	Gregory IV	Rome	827	844
St. Innocent I	Albano	401	417	Sergius II	Rome	844	847
St. Zozimus	Greece	417	418	St. Leo IV	Rome	847	855
St. Boniface I	Rome	418	422	Benedict III	Rome	855	858
St. Celestine I	Campania	422	432	St. Nicholas	Rome	858	867
St. Sixtus III	Rome	432	440	Adrian II	Rome	867	872
St. Leo I (the Great)	Tuscia	440	461	John VIII	Rome	872	882
St. Hilary	Sardo	461	468	Marinus I	Gallese	882	884
St. Simplicius	Tivoli	468	483	St. Adrian III	Rome	884	885
St. Felix III (II)	Rome	483	492	Stephen VI	Rome	885	891
St. Gelasius I	Africa	492	496	Formosus	Portus	891	896
Anastasius II	Rome	496	498	Boniface VI	Rome	896	896
St. Symmachus	Sardo	498	514	Stephen VII	Rome	896	897
St. Hormisdas	Frosinone	514	523	Romanus	Gallese	897	897
St. John I	Tuscia	523	526	Theodore II	Rome	897	897
St. Felix IV (III)	Sannio	526	530	John IX	Tivoli	898	900
Boniface II	Rome	530	532	Benedict IV	Rome	900	903
John II	Rome	533	535	Leo V	Ardea	903	903
St. Agapitus I	Rome	535	536	Sergius III	Rome	904	911
St. Silverius	Campania	536	537	Anastasius III	Rome	911	913
Vigilius	Rome	537	555	Landus	Sabina	913	914
Pelagius I	Rome	556	561	John X	Tossignano	914	928
John III	Rome	561	574	Leo VI	Rome	928	928
Benedict I	Rome	575	579	Stephen VIII	Rome	928	931
Pelagius II	Rome	579	590	John XI	Rome	931	935
St. Gregory I (the Great)	Rome	590	604	Leo VII	Rome	936	939
				Stephen IX	Rome	939	942
				Marinus II	Rome	942	946



Name	Birthplace	Access.	End of reign	Name	Birthplace	Access.	End of reign
Agapitus II	Rome	946	955	Bl. Benedict XI	Treviso	1303	1304
John XII	Tusculum	955	964	Clement V	France	1305	1314
Leo VIII	Rome	963	965	John XXII	Cahors	1316	1334
Benedict V	Rome	964	966	Benedict XII	France	1334	1342
John XIII	Rome	965	972	Clement VI	France	1342	1352
Benedict VI	Rome	973	974	Innocent VI	France	1352	1362
Benedict VII	Rome	974	983	Bl. Urban V	France	1362	1370
John XIV	Pavia	983	984	Gregory XI	France	1370	1378
John XV	Rome	985	996	Urban VI	Naples	1378	1389
Gregory V	Saxony	996	999	Boniface IX	Naples	1389	1404
Sylvester II	Alvernia	999	1003	Innocent VII	Sulmona	1404	1406
John XVII	Rome	1003	1003	Gregory XII	Venetia	1406	1415
John XVIII	Rome	1004	1009	Martin V	Rome	1417	1431
Serghius IV	Rome	1009	1012	Eugene IV	Venetia	1431	1447
Benedict VIII	Tusculum	1012	1024	Nicholas V	Sarzana	1447	1455
John XIX	Tusculum	1024	1032	Callistus III	Valencia	1455	1458
Benedict IX*	Tusculum	1032	1044	Pius II	Siena	1458	1464
Sylvester III	Rome	1045	1045	Paul II	Venetia	1464	1471
Benedict IX (2nd time)	....	1045	1045	Sixtus IV	Savona	1471	1484
Gregory VI	Rome	1045	1046	Innocent VIII	Genoa	1484	1492
Clement II	Saxony	1046	1047	Alexander VII	Valencia	1492	1503
Benedict IX (3rd time)	....	1047	1048	Pius III	Siena	1503	1503
Damasus II	Bavaria	1048	1048	Julius II	Savona	1503	1513
St. Leo IX	Egshelm-Dagsburg	1049	1054	Leo X	Florence	1513	1521
Victor II	Dollnstein-Hirschberg	1055	1057	Adrian VI	Utrecht	1522	1523
Stephen X	Lorraine	1057	1058	Clement VII	Florence	1523	1534
Nicholas II	Burgundy	1059	1061	Paul III	Rome	1534	1549
Alexander II	Milan	1061	1073	Julius III	Rome	1550	1555
St. Gregory VII	Tuscia	1073	1085	Marcellus II	Montepulciano	1555	1555
Bl. Victor III	Benevento	1086	1087	Paul IV	Naples	1555	1559
Bl. Urban II	France	1088	1099	Pius IV	Milan	1559	1565
Paschal II	Ravenna	1099	1118	St. Pius V	Bosco	1566	1572
Gelasius II	Gaeta	1118	1119	Gregory XIII	Bologna	1572	1585
Callistus II	Burgundy	1119	1124	Sixtus V	Grottammare	1585	1590
Honorius II	Flagnano	1124	1130	Urban VII	Rome	1590	1590
Innocent II	Rome	1130	1143	Gregory XIV	Cremona	1590	1591
Celestine II	Città di Castello	1143	1144	Innocent IX	Bologna	1591	1591
Lucius II	Bologna	1144	1145	Clement VIII	Florence	1592	1605
Bl. Eugene III	Pisa	1145	1153	Leo XI	Florence	1605	1605
Anastasius IV	Rome	1153	1154	Paul V	Rome	1605	1621
Adrian IV	England	1154	1159	Gregory XV	Bologna	1621	1623
Alexander III	Siena	1159	1181	Urban VIII	Florence	1623	1644
Lucius III	Lucca	1181	1185	Innocent X	Rome	1644	1655
Urban III	Milan	1185	1187	Alexander VII	Siena	1655	1667
Gregory VIII	Benevento	1187	1187	Clement IX	Pistoia	1667	1669
Clement III	Rome	1187	1191	Clement X	Rome	1670	1676
Celestine III	Rome	1191	1198	Innocent XI	Como	1676	1689
Innocent III	Anagni	1198	1216	Alexander VIII	Venetia	1689	1691
Honorius III	Rome	1216	1227	Innocent XII	Naples	1691	1700
Gregory IX	Anagni	1227	1241	Clement XI	Urbino	1700	1721
Celestine IV	Milan	1241	1241	Innocent XIII	Rome	1721	1724
Innocent IV	Genoa	1243	1254	Benedict XIII	Rome	1724	1730
Alexander IV	Anagni	1254	1261	Clement XII	Florence	1730	1740
Urban IV	Troyes	1261	1264	Benedict XIV	Bologna	1740	1758
Clement IV	France	1265	1268	Clement XIII	Venetia	1758	1769
Bl. Gregory X	Piacenza	1271	1276	Clement XIV	Rimini	1769	1774
Bl. Innocent V	Savoy	1276	1276	Pius VI	Cesena	1775	1799
Adrian V	Genoa	1276	1276	Pius VII	Cesena	1800	1823
John XXI	Portugal	1276	1277	Leo XII	Fabriziano	1823	1829
Nicholas III	Rome	1277	1280	Pius VIII	Cingoli	1829	1830
Martin IV	France	1281	1285	Gregory XVI	Belluno	1831	1846
Honorius IV	Rome	1285	1287	Pius IX	Senigallia	1846	1878
Nicholas IV	Ascoli	1288	1292	Leo XIII	Carpinetto	1878	1903
St. Celestine V	Isernia	1294	1294	St. Pius X	Riese	1903	1914
Boniface VIII	Anagni	1294	1303	Benedict XV	Genoa	1914	1922
				Pius XI	Desio	1922	1939
				Pius XII	Rome	1939	

\* If the triple removal of Benedict IX was not valid, Sylvester III, Gregory VI and Clement II were antipopes.

NOTE: This list of Popes, adapted from the *Annuario Pontificio*, is in accordance with the recent revisions made by Monsignor Mercati, Prefect of the Vatican Archives. All Popes before Sylvester I are listed as martyrs; other martyrs were: St. John I, St. Silverius and St. Martin I. The accession year is that during which the Pope was elected.

## Archbishops of Canterbury

Sequence	Name	Created	Sequence	Name	Created
1	Augustine (consecrated Bishop 597)	601	50	Robert Winchelsey	1294
2	Laurentius	604	51	Walter Reynolds	1313
3	Mellitus	619	52	Simon Mepeham	1328
4	Justus	624	53	John Stratford	1333
5	Honorius	627	54	Thomas Bradwardine	1349
6	Deusdedit	655	55	Simon Islip	1349
7	Theodorus	668	56	Simon Langham	1366
8	Beorhtweald	693	57	William Whittlesey	1368
9	Tatwine	731	58	Simon Sudbury	1375
10	Nothelm	735	59	William Courtenay	1381
11	Cuthbeorht	740	60	Thomas Arundel	1396
12	Breguwine	761	61	Roger Walden	1398
13	Jaenbeorht	765	62	Thomas Arundel (restored)	1399
14	Æthelheard	793	63	Henry Chichele	1414
15	Wulfred	805	64	John Stafford	1443
16	Feologild	832	65	John Kemp	1452
17	Ceolnoth	833	66	Thomas Bourchier	1454
18	Æthelred	870	67	John Morton	1486
19	Plegmund	890	68	Henry Dean	1501
20	Æthelhelm	914	69	William Warham	1503
21	Wulhelm	923	70	Thomas Cranmer	1533
22	Oda	942	71	Reginald Pole	1556
23	Ælfsige	959	72	Matthew Parker	1559
24	Beornthelm	959	73	Edmund Grindal	1576
25	Dunstan	960	74	John Whitgift	1583
26	Æthelgar	988	75	Richard Bancroft	1604
27	Sigeric Serio	990	76	George Abbot	1611
28	Ælfric	995	77	William Laud	1633
29	Ælfheah	1005	78	William Juxon	1660
30	Lyfing	1013	79	Gilbert Sheldon	1663
31	Æthelnoth	1020	80	William Sancroft	1678
32	Eadsige	1038	81	John Tillotson	1691
33	Robert (Champart) of Jumièges	1051	82	Thomas Tenison	1695
34	Stigand	1052	83	William Wake	1716
35	Lanfranc	1070	84	John Potter	1737
36	Anselm	1093	85	Thomas Herring	1747
37	Ralph d'Escures	1114	86	Matthew Hutton	1757
38	William de Corbell	1123	87	Thomas Secker	1758
39	Theobald	1139	88	Frederick Cornwallis	1768
40	Thomas Becket	1162	89	John Moore	1783
41	Richard (of Dover)	1174	90	Charles Manners-Sutton	1805
42	Baldwin	1185	91	William Howley	1828
43	Hubert Walter	1193	92	John Bird Sumner	1848
44	Stephen Langton	1207	93	Charles Thomas Longley	1862
45	Richard le Grant (of Wetharshed)	1229	94	Archibald Campbell Tait	1868
46	Edmund Rich	1234	95	Edward White Benson	1883
47	Boniface of Savoy	1245	96	Frederick Temple	1896
48	Robert Kilwardby	1273	97	Randall Thomas Davidson	1903
49	John Peckham (Peckham)	1279	98	Cosmo Gordon Lang	1928
			99	William Temple	1942
			100	Geoffrey Francis Fisher	1945

(NOTE: Anglicans consider the line of Archbishops unbroken from Augustine to the present day. Roman Catholics consider the office vacant since 1558, the death of Pole.)

### History of the Christian Church in England

5th century	Arrival in England of Angles, Saxons and Jutes. Church isolated from Rome.	1646	Puritan rebellion. Presbyterianism becomes state religion.
597	Augustine sent to convert Saxons.	1660	Restoration. Power of Church of England restored under Charles II.
1534	Act of Supremacy makes king head of Church of England.	1739	John Wesley founds Methodism.
1554	Church again united with Rome under reign of Mary.	1829	Catholic emancipation.
1558	Church restored to Crown at accession of Elizabeth.	1833-45	Oxford Movement attempts to bring Church of England closer to ideals of ancient Church. This movement continues as important influence.
1611	King James version of Bible.		

## Jewish Congregational and Rabbinical Organizations

Central Conference of American Rabbis: 8206 Euclid Ave., Cleveland 3, Ohio.

Rabbinical Assembly of America: 3080 Broadway, New York 27, N. Y.

Rabbinical Council of America, Inc.: 331 Madison Ave., New York 17, N. Y.

Synagogue Council of America: 110 W. 42nd St., New York 18, N. Y.

Union of American Hebrew Congregations: 838 Fifth Ave., New York 21, N. Y.

Union of Orthodox Rabbis of the U. S. and Canada: 132 Nassau St., New York 38.

The United Synagogue of America: 3080 Broadway, New York 27, N. Y.

Union of Orthodox Jewish Congregations of America: 305 Bdwy., New York 7.

## Religious and Secular Holidays, 1955

**NEW YEAR'S DAY**—Saturday, Jan. 1—A legal holiday in all states and the District of Columbia, New Year's Day has its origin in Roman times, when sacrifices were offered to Janus, the two-faced Roman deity who looked back on the past and forward to the future.

**EPIPHANY**—Thursday, Jan. 6—Falls the twelfth day after Christmas and commemorates the manifestation of Jesus as the Son of God, as represented by the adoration of the Magi, the baptism of Jesus, and the miracle of the wine at the marriage feast at Cana. Epiphany originally marked the beginning of the carnival season preceding Lent, and the evening (sometimes the eve) is known as Twelfth Night.

**LINCOLN'S BIRTHDAY**—Saturday, Feb. 12—A legal holiday in many states, this day was first formally observed in Washington, D. C., in 1866, when both houses of Congress gathered for a memorial address in honor of the dead President.

**ST. VALENTINE'S DAY**—Monday, Feb. 14—This day is the festival of two 3rd-century martyrs, both named St. Valentine. It is not known why this day is associated with lovers. It may derive from an old pagan festival about this time of year, or it may have been inspired by the belief that birds mate on this day.

**WASHINGTON'S BIRTHDAY**—Tuesday, Feb. 22—The birthday of George Washington is celebrated as a legal holiday in every state of the Union (except Idaho and Nevada), the District of Columbia and all territories. The observance began 1796.

**SHROVE TUESDAY**—Feb. 22—Falls the day before Ash Wednesday and marks the end of the carnival season, which once began on Epiphany but is now usually celebrated the last three days before Lent. In France, the day is known as Mardi Gras (Fat Tuesday), and Mardi Gras celebrations are also held in several American cities, particularly in New Orleans. The day is sometimes called Pancake Tuesday by the English because of the need of using up fats which were prohibited during Lent.

**ASH WEDNESDAY**—Feb. 23—The first day of the Lenten season, which lasts forty

days. Having its origin sometime before A.D. 1000, it is a day of public penance and is marked in the Roman Catholic Church by the burning of the palms blessed on the previous Palm Sunday. With his thumb, the priest then marks a cross upon the forehead of each worshipper. The Anglican Church and a few Protestant groups in the United States also celebrate the day, but generally without the use of ashes.

**ST. PATRICK'S DAY**—Thursday, March 17—St. Patrick, patron saint of Ireland, has been honored in America since the first days of the nation. There are many dinners and meetings and perhaps the most notable part of the observance is the annual St. Patrick's Day parade on Fifth Avenue in New York City.

**PALM SUNDAY**—April 3—Is observed the Sunday before Easter to commemorate the entry of Jesus into Jerusalem. The procession and the ceremonies introducing the benediction of palms probably had their origin in Jerusalem.

**FIRST DAY OF PASSOVER (Pesach)**—Thursday, Apr. 7 (Nisan 15)—The Feast of the Passover, also called the Feast of Unleavened Bread, commemorates the escape of the first-born of the Jews from the Angel of Death, who took from the Egyptians their first-born, thus fulfilling the prophecy of Moses. As the Jews fled Egypt, they ate unleavened bread, and from that time the Jews have allowed no leavening in the houses during Passover, bread being replaced by matzoth.

**GOOD FRIDAY**—April 8—This day commemorates the Crucifixion, which is retold during services from the Gospel according to St. John. A feature in Roman Catholic churches is the Mass of the Presanctified: there is no Consecration, the Host having been consecrated the previous day. The eating of hot cross buns on this day is said to have started in England.

**EASTER SUNDAY**—April 10—Observed in all Christian churches, Easter is the principal feast of the ecclesiastical year, and commemorates the Resurrection of Jesus. It is celebrated on the first Sunday after the full moon which occurs on or next after March 21 and is therefore cele-



brated between March 22 and April 25 inclusive. This date was fixed by the Council of Nicaea in 325.

**ASCENSION DAY**—Thursday, May 19—Took place in the presence of His apostles 40 days after the Resurrection of Jesus. It is traditionally held to have occurred on Mount Olivet in Bethany.

**FIRST DAY OF SHABUOTH** (Hebrew Pentecost)—Friday, May 27 (Sivan 6)—This festival, sometimes called the Feast of Weeks, or of Harvest, or of the First Fruits, falls fifty days after Passover and originally celebrated the end of the seven-week grain harvesting season. In later tradition, it also celebrated the giving of the Law to Moses on Mt. Sinai, and both aspects have come down to the present.

**PENTECOST** (Whitsunday)—May 29—This day commemorates the descent of the Holy Ghost upon the Apostles fifty days after the Resurrection. The sermon by the Apostle Peter, which led to the baptism of 3000 who professed belief, originated the ceremonies that have since been followed. "Whitsunday" is believed to have come from "white Sunday" when, among the English, white robes were worn by those baptized on the day.

**MEMORIAL DAY**—Monday, May 30—Also known as Decoration Day, Memorial Day is a legal holiday in most of the states and in the territories, and is also observed by the armed forces. In 1868, General John A. Logan, Commander in Chief of the Grand Army of the Republic, issued an order designating the day as one in which the graves of soldiers would be decorated. The holiday was originally devoted to honoring the memory of those who fell in the Civil War, but is now also dedicated to the memory of the dead of all wars.

**FLAG DAY**—Tuesday, June 14—This day commemorates the adoption by the Continental Congress on June 14, 1777, of the Stars and Stripes as the U. S. flag. Although it is a legal holiday only in Pennsylvania, President Truman, on Aug. 3, 1949, signed a bill requesting the President to call for its observance each year by proclamation.

**INDEPENDENCE DAY**—Monday, July 4—The day of the adoption of the Declaration of Independence in 1776, celebrated in all states and territories. The observance began in the next year in the city of Philadelphia.

**LABOR DAY**—Monday, Sept. 5—Observed the first Monday in September in all states and territories, Labor Day was first celebrated in New York in 1882 under the sponsorship of the Central Labor Union, following the suggestion of Peter J. McGuire, of the Knights of Labor, that the day be set aside in honor of labor.

**FIRST DAY OF ROSH HASHANA** (Jewish New Year)—Saturday, Sept. 17 (Tishri 1)—This day marks the beginning of the Jewish year 5716 and opens the Ten Days of Penitence, closing with Yom Kippur.

**YOM KIPPUR** (Day of Atonement)—Monday, Sept. 26 (Tishri 10)—This day marks the end of the Ten Days of Penitence that began with Rosh Hashana and is the holiest day of the Jewish year. It is described in *Leviticus* as the "Sabbath of Sabbaths," and synagogue services begin the preceding sundown, resume the following morning, and continue through the day to sundown.

**FIRST DAY OF SUKKOTH** (Feast of Tabernacles)—Saturday, Oct. 1 (Tishri 15)—This festival, also known as the Feast of the Ingathering, originally celebrated the fruit harvest, and the name comes from the booths or tabernacles in which the Jews lived during the harvest, although one tradition traces it to the shelters used by the Jews in their wandering through the wilderness. During the festival, many Jews build small huts in their back yards or on the roofs of their houses.

**COLUMBUS DAY**—Wednesday, Oct. 12—A legal holiday in many states, commemorating the discovery of America by Columbus in 1492. Quite likely the first celebration of Columbus Day was that organized in 1792 by the Society of St. Tammany, or Columbian Order, more widely known as Tammany Hall.

**ELECTION DAY** (in certain states)—Tuesday, Nov. 8—Since 1845, by Act of Congress, the first Tuesday after the first Monday in November is the date for choosing Presidential electors. State elections are also generally held on this day.

**VETERANS DAY**—Friday, Nov. 11—Armistice Day was established in 1926 to commemorate the signing in 1918 of the Armistice ending World War I. On June 1, 1954, the name was changed to Veterans Day so as to honor all men and women who have served America in its armed forces.

**THANKSGIVING**—Thursday, Nov. 24—Observed nationally on the fourth Thursday in November by Act of Congress (1941), the first such national proclamation having been issued by President Lincoln in 1863, on the urging of Mrs. Sarah J. Hale, editor of *Godey's Lady's Book*. Most Americans believe that the holiday dates back to the day of thanks ordered by Governor Bradford of Plymouth Colony in New England in 1621 but scholars point out that days of thanks stem from ancient times.

**FIRST SUNDAY IN ADVENT**—Nov. 27—Advent is the season in which the faithful must prepare themselves for the advent of the Saviour on Christmas. The four Sun-

days before Christmas are marked by special church services.

**FIRST DAY OF HANUKKAH** (Festival of Lights)—Saturday, Dec. 10 (Kislev 25)—This festival was instituted by Judas Macabaeus in 165 B.C. to celebrate the purification of the Temple of Jerusalem, which had been desecrated three years earlier by Antiochus Epiphanes, who set up a pagan altar and offered sacrifices to Zeus Olympus. In Jewish homes, a light is lighted the first night, and on each succeeding night of the eight-day festival, another is lighted.

**CHRISTMAS** (Feast of the Nativity)—Sunday, Dec. 25—The most important and the most widely celebrated holiday of

the Christian year, it is observed as the anniversary of the birth of Jesus. Christmas customs are centuries old. The mistletoe, for example, comes from the Druids, who, in hanging the mistletoe, hoped for peace and good fortune. Use of such plants as holly comes from the ancient belief that such plants blossomed at Christmas. Comparatively recent is the Christmas tree, first set up in Germany in the 17th century, and the use of candles on trees developed from the belief that candles appeared by miracle on the trees at Christmas. Colonial Manhattan Islanders introduced the name Santa Claus, a corruption of the Dutch name for the 4th-century Asia-Minor St. Nicholas.

## Movable Holidays, 1955 to 1964

### CHRISTIAN AND SECULAR

Year	Ash Wed.	Easter	Pentecost	Labor Day	Election Day	Thanksgiving	1st Sun. Advent
1955	Feb. 23	Apr. 10	May 29	Sept. 5	Nov. 8	Nov. 24	Nov. 27
1956	Feb. 15	Apr. 1	May 20	Sept. 3	Nov. 6	Nov. 22	Dec. 2
1957	Mar. 6	Apr. 21	June 9	Sept. 2	Nov. 5	Nov. 28	Dec. 1
1958	Feb. 19	Apr. 6	May 25	Sept. 1	Nov. 4	Nov. 27	Nov. 30
1959	Feb. 11	Mar. 29	May 17	Sept. 7	Nov. 3	Nov. 26	Nov. 29
1960	Mar. 2	Apr. 17	June 5	Sept. 5	Nov. 8	Nov. 24	Nov. 27
1961	Feb. 15	Apr. 2	May 21	Sept. 4	Nov. 7	Nov. 23	Dec. 3
1962	Mar. 7	Apr. 22	June 10	Sept. 3	Nov. 6	Nov. 22	Dec. 2
1963	Feb. 27	Apr. 14	June 2	Sept. 2	Nov. 5	Nov. 28	Dec. 1
1964	Feb. 12	Mar. 29	May 17	Sept. 7	Nov. 3	Nov. 26	Nov. 29

Shrove Tuesday: 1 day before Ash Wednesday.

Palm Sunday: 7 days before Easter.

Maudy Thursday: 3 days before Easter.

Good Friday: 2 days before Easter.

Holy Saturday: 1 day before Easter.

Ascension Day: 10 days before Pentecost.

Trinity Sunday: 7 days after Pentecost.

Corpus Christi: 11 days after Pentecost.

### JEWISH

Year	Purim	1st day Passover	1st day Shabuoth	1st day Rosh Hashana	Yom Kippur	1st Day Sukkoth	Simhath Torah	1st Day Hanukkah
1955	Mar. 8	Apr. 7	May 27	Sept. 17	Sept. 26	Oct. 1	Oct. 9	Dec. 10
1956	Feb. 26	Mar. 27	May 16	Sept. 6	Sept. 15	Sept. 20	Sept. 28	Nov. 29
1957	Mar. 17	Apr. 16	June 5	Sept. 26	Oct. 5	Oct. 10	Oct. 18	Dec. 18
1958	Mar. 6	Apr. 5	May 25	Sept. 15	Sept. 24	Sept. 29	Oct. 7	Dec. 7
1959	Mar. 24	Apr. 23	June 12	Oct. 3	Oct. 12	Oct. 17	Oct. 25	Dec. 26
1960	Mar. 13	Apr. 12	June 1	Sept. 22	Oct. 1	Oct. 6	Oct. 14	Dec. 14
1961	Mar. 2	Apr. 1	May 21	Sept. 11	Sept. 20	Sept. 25	Oct. 3	Dec. 3
1962	Mar. 20	Apr. 19	June 8	Sept. 29	Oct. 8	Oct. 13	Oct. 21	Dec. 22
1963	Mar. 10	Apr. 9	May 29	Sept. 19	Sept. 28	Oct. 3	Oct. 11	Dec. 11
1964	Feb. 27	Mar. 28	May 17	Sept. 7	Sept. 16	Sept. 21	Sept. 29	Nov. 30

Length of Jewish holidays (O = Orthodox, C = Conservative, R = Reform):

Passover: O & C, 8 days (holy days: first 2 and last 2); R, 7 days (holy days: first and last).

Shabuoth: O & C, 2 days; R, 1 day.

Rosh Hashana: O & C, 2 days; R, 1 day.

Yom Kippur: All groups, 1 day.

Sukkoth: All groups, 7 days (holy days: O & C, first 2; R, first only). O & C observe two additional days: Shemini

Atsereth (Eighth Day of the Feast) and Simhath Torah (Rejoicing of the Law). R observes Shemini Atsereth but not Simhath Torah.

Hanukkah: All groups, 8 days.

NOTE: All holidays begin at sundown on the evening before the date given.

# Legal Holidays in the United States, Alaska, Hawaii & Puerto Rico

## Holidays Widely Observed

**January 1, New Year's Day:** All states, D. C., Alaska, Hawaii, Puerto Rico.

**February 12, Lincoln's Birthday:** Arizona, California, Colorado, Connecticut, Delaware, Illinois, Indiana, Iowa, Kansas, Kentucky, Maryland, Michigan, Minnesota, Missouri, Montana, Nebraska, Nevada, New Jersey, New Mexico, New York, North Dakota, Ohio, Oregon, Pennsylvania, South Dakota, Tennessee, Utah, Vermont, Washington, West Virginia, Wisconsin, Wyoming, Alaska.

**February 22, Washington's Birthday:** All states (except Idaho), D. C., Alaska, Hawaii, Puerto Rico.

**May 30, Memorial (or Decoration) Day:** All states (except Alabama, Georgia, Mississippi, South Carolina, Texas), D. C., Alaska, Hawaii, Puerto Rico.

**July 4, Independence Day:** All states, D. C., Alaska, Hawaii, Puerto Rico.

**September (1st Monday), Labor Day:** All states, D. C., Alaska, Hawaii, Puerto Rico.

**October 12, Columbus Day:** All states (except Arkansas, D. C., Idaho, Iowa, Maine, Mississippi, North Carolina, Oregon, South Carolina, South Dakota, Tennessee), Puerto Rico.

**November (1st Tuesday after 1st Monday), Election Day:** Arizona, Arkansas, California, Colorado, Delaware, Florida, Illinois, Indiana, Iowa, Maryland, Michigan, Missouri, Montana, Nevada, New Hampshire, New Jersey, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Virginia, Washington, Wisconsin, Wyoming, Hawaii.

**November 11, Veterans Day (formerly Armistice Day):** All states, D. C., Alaska, Puerto Rico.

**November (4th Thursday), Thanksgiving Day:** All states, D. C., Alaska, Hawaii, Puerto Rico.

**December 25, Christmas:** All states, D. C., Alaska, Hawaii, Puerto Rico.

## Other Holidays

**January 6, Three Kings' Day:** Puerto Rico.

**January 8, Battle of New Orleans:** Louisiana.

**January 11, De Hostos' Birthday:** Puerto Rico.

**January 19, Robert E. Lee's Birthday:** Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Texas, Virginia.

**January 20, Inauguration Day (every 4 yrs.):** D. C., Louisiana (Baton Rouge, only).

**January 30, F. D. Roosevelt's Birthday:** Kentucky.

**February or March (1 day before Ash Wednesday), Mardi Gras (Shrove Tuesday):** Alabama, Florida (in certain counties), Louisiana (in certain parishes and municipalities).

**February 14, Admission Day:** Arizona.

**March or April (some day between Mar. 1 to Apr. 15), Arbor Day:** Utah.

**March 2, Texas Independence Day.**

**March 15, Andrew Jackson's Birthday:** Tennessee.

**March or April (2 days before Easter), Good Friday:** Connecticut, Delaware, Florida, Illinois, Indiana, Louisiana, Maryland, Minnesota, New Jersey, North Dakota, Pennsylvania, Tennessee, Hawaii, Puerto Rico.

**March or April (1 day after Easter), Easter Monday:** North Carolina.

**March 22, Emancipation Day:** Puerto Rico.

**March 25, Maryland Day.**

**March 26, Kuhio Day:** Hawaii.

**March 30, Seward's Day:** Alaska.

**April 12, Halifax Resolutions Anniversary:** North Carolina.

**April 13, Thomas Jefferson's Birthday:** Alabama, Missouri, Oklahoma, Virginia.

**April 16, De Diego's Birthday:** Puerto Rico.

**April 19, Patriots' Day:** Maine, Massachusetts.

**April 21, San Jacinto Day:** Texas.

**April 22, Arbor Day:** Nebraska.

**April 22, Oklahoma Day.**

**April 26, Confederate Memorial Day:** Alabama, Florida, Georgia, Mississippi.

**April (4th Monday), Fast Day:** New Hampshire.

**May 4, Rhode Island Independence Day.**

**May (2nd Sunday), Mother's Day:** Arizona, Oklahoma.

**May 10, Confederate Memorial Day:** North Carolina, South Carolina.

**May 20, Mecklenburg Independence Day:** North Carolina.

**June 3, Jefferson Davis' Birthday:** Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi, South Carolina, Tennessee, Texas, Virginia.

**June 11, Kamehameha Day:** Hawaii.

**June 14, Flag Day:** Pennsylvania.

**June 20, West Virginia Day.**

**June (3rd Sunday), Father's Day:** Arizona.

**July 13, Nathan Bedford Forrest's Birthday:** Tennessee.

**July 17, Muñoz Rivera's Birthday:** Puerto Rico.

**July 24, Pioneer Day:** Utah.

**July 25, Constitution Day:** Puerto Rico.

**July 27, Barbosa's Birthday:** Puerto Rico.

**August 1, Colorado Day.**

**August 14, V-J Day:** Arkansas (called World War II Memorial), Rhode Island.

**August 16, Bennington Battle Day:** Vermont.

**August 30, Huey P. Long Day:** Louisiana.

**September (1st Saturday after full moon), Indian Day:** Oklahoma.

**September 5, Santiago Iglesias Day:** Puerto Rico.

**September 9, Admission Day:** California.

**September 12, Defenders' Day:** Maryland.

**September 16, Cherokee Strip Day:** Oklahoma.

**October (Thursday of State Fair Week):** South Carolina (in counties where Fair is held).

**October 10, Oklahoma Historical Day.**

**October 18, Alaska Day.**

**October 31, Admission Day:** Nevada.

**November 1, All Saints' Day:** Louisiana.

**November 4, Will Rogers Day:** Oklahoma.

**November 19, Discovery Day:** Puerto Rico.

**December 26, Day after Christmas:** South Carolina.



# AWARDS



## NOBEL PRIZES

The Nobel prizes are awarded under the will of Alfred Bernhard Nobel, Swedish chemist and engineer, who died in 1896. The interest of the fund is divided annually among the persons who have made the most outstanding contributions in the field of physics, chemistry, and physiology or medicine, who have produced the most distinguished literary work of an idealist tendency, and who have contributed most toward world peace.

The prizes for physics and chemistry are awarded by the Swedish Academy of Science in Stockholm, the one for physiology or medicine by the Caroline Medical Institute in Stockholm, that for literature by the academy in Stockholm, and that for peace by a committee of five elected by the Norwegian Storting. The distribution of prizes was begun on December 10, 1901, the anniversary of Nobel's death. The amount of each prize varies with the income from the fund and since 1936 has stood at approximately £8,000.

Year	Literature	Peace
1901	René F. A. Sully Prudhomme (France)	Henri Dunant (Switzerland) and Frederick Passy (France)
1902	Theodor Mommsen (Germany)	Elie Ducommun and Albert Gobat (Switzerland)
1903	Björnstjerne Björnson (Norway)	Sir William R. Cremer (England)
1904	Frédéric Mistral (France) and José Echegaray (Spain)	Institut de Droit International (Belgium)
1905	Henryk Sienkiewicz (Poland)	Bertha von Suttner (Austria)
1906	Giosuè Carducci (Italy)	Theodore Roosevelt (U. S.)
1907	Rudyard Kipling (England)	Ernesto T. Moneta (Italy) and Louis Renault (France)
1908	Rudolf Eucken (Germany)	Klas P. Arnoldson (Sweden) and Frederik Bajer (Denmark)
1909	Selma Lagerlöf (Sweden)	Auguste M. F. Beernaert (Belgium) and Baron Paul H. B. B. d'Estournelles de Constant de Rebecque (France)
1910	Paul von Heyse (Germany)	The Bureau International Permanent de la Paix (Switzerland)
1911	Maurice Maeterlinck (Belgium)	Tobias M. C. Asser (Holland) and Alfred H. Fried (Austria)
1912	Gerhart Hauptmann (Germany)	Elihu Root (U. S.)
1913	Rabindranath Tagore (India)	Henri La Fontaine (Belgium)
1915	Romain Rolland (France)	No award
1916	Verner von Heidenstam (Sweden)	No award
1917	Karl Gjellerup (Denmark) and Henrik Pontoppidan (Denmark)	International Red Cross
1919	Carl Spitteler (Switzerland)	Woodrow Wilson (U. S.)
1920	Knut Hamsun (Norway)	Léon Bourgeois (France)
1921	Anatole France (France)	Karl H. Branting (Sweden) and Christian L. Lange (Norway)
1922	Jacinto Benavente (Spain)	Fridtjof Nansen (Norway)
1923	William B. Yeats (Ireland)	No award
1924	Wladyslaw Reymont (Poland)	No award
1925	George Bernard Shaw (England)	Sir Austen Chamberlain (England) and Charles G. Dawes (U. S.)
1926	Grazia Deledda (Italy)	Aristide Briand (France) and Gustav Stresemann (Germany)
1927	Henri Bergson (France)	Ferdinand Buisson (France) and Ludwig Quidde (Germany)
1928	Sigrd Undset (Norway)	No award
1929	Thomas Mann (Germany)	Frank B. Kellogg (U. S.)
1930	Sinclair Lewis (U. S.)	Lars O. J. Söderblom (Sweden)
1931	Erik A. Karlfeldt (Sweden)	Jane Addams (U. S.) and Nicholas M. Butler (U. S.)
1932	John Galsworthy (England)	No award
1933	Ivan G. Bunin (Russia)	Sir Norman Angell (England)
1934	Luigi Pirandello (Italy)	Arthur Henderson (England)
1935	No award	Carl von Ossietzky (Germany)
1936	Eugene O'Neill (U. S.)	Carlos de S. Lamas (Argentina)
1937	Roger Martin du Gard (France)	Lord Cecil of Chelwood (England)
1938	Pearl S. Buck (U. S.)	Office International Nansen pour les Réfugiés (Switzerland)
1939	Frans Eemil Sillanpää (Finland)	No award

Year	Literature	Peace
1944	Johannes V. Jensen (Denmark)	International Red Cross
1945	Gabriela Mistral (Chile)	Cordell Hull (U. S.)
1946	Hermann Hesse (Switzerland)	Emily G. Balch and John R. Mott (U. S.)
1947	André Gide (France)	American Friends Service Committee (U. S.) and British Society of Friends' Service Council (England)
1948	Thomas Stearns Eliot (England)	No award
1949	William Faulkner (U. S.)	Lord John Boyd Orr (Scotland)
1950	Bertrand Russell (England)	Ralph J. Bunche (U. S.)
1951	Pär Lagerkvist (Sweden)	Léon Jouhaux (France)
1952	François Mauriac (France)	Albert Schweitzer (Fr. Eq. Af.)
1953	Sir Winston Churchill (England)	George C. Marshall (U. S.)

Year	Physics	Chemistry	Medicine
1901	Wilhelm K. Roentgen, for discovery of Roentgen rays.	Jacobus H. van 't Hoff; laws of chemical dynamics and osmotic pressure in solutions.	Emil A. von Behring, for work on serum therapy against diphtheria.
1902	Hendrik A. Lorentz and Pieter Zeeman, for work on influence of magnetism upon radiation.	Emil Fischer, for experiments in sugar and purin groups of substances.	Sir Ronald Ross, for work on malaria.
1903	A. Henri Becquerel, work on discovery of spontaneous radioactivity. Pierre and Marie Curie; study of radiation.	Svante A. Arrhenius, for his electrolytic theory of dissociation.	Niels R. Finsen, for his treatment of lupus vulgaris, with concentrated light rays.
1904	John Strutt (Lord Rayleigh) for discovery of argon in investigating gas density.	Sir William Ramsay; discovery and determination of place of inert gaseous elements in air.	Ivan P. Pavlov, for work on the physiology of digestion.
1905	Philipp Lenard, for work with cathode rays.	Adolf von Baeyer, for work on organic dyes and hydroaromatic combinations.	Robert Koch, for work on tuberculosis.
1906	Joseph J. Thomson, for investigations on passage of electricity through gases.	Henri Moissan, for isolation of fluorine, and introduction of electric furnace.	Camillo Golgi and Santiago Ramón y Cajal, for work on structure of the nervous system.
1907	Albert A. Michelson, for spectroscopic and metrologic investigations.	Eduard Buchner; discovery of cell-less fermentation and investigations in biological chem.	Charles L. A. Laveran, for work with protozoa in the generation of disease.
1908	Gabriel Lippmann, for method of reproducing colors by photography.	Ernest Rutherford, for investigations into disintegration of elements and chemistry of radioactive substances.	Paul Ehrlich and Élie Metchnikoff, for work on immunity.
1909	Guglielmo Marconi and Ferdinand Braun, for development of wireless.	Wilhelm Ostwald, for work on catalysis and investigations into chemical equilibrium and reaction rates.	Theodor Kocher, for work on the thyroid gland.
1910	Johannes D. van der Waals, for work with the equation of state for gases and liquids.	Otto Wallach, for work in the field of alicyclic compounds.	Albrecht Kossel, for achievements in the chemistry of the cell.
1911	Wilhelm Wien, for his laws governing the radiation of heat.	Marie Curie, for discovery of elements radium and polonium.	Allvar Gullstrand, for work on the dioptrics of the eye.
1912	Gustaf Dalén, for discovery of automatic regulators used in lighting lighthouses and light buoys.	Victor Grignard, for reagent discovered by and named after him; and Paul Sabatier, for the methods of hydrogenating organic compounds.	Alexis Carrel, for work on vascular ligature and grafting of blood vessels and organs.

Year	Physics	Chemistry	Medicine
1913	H. Kamerlingh Onnes, for work leading to production of liquid helium.	Alfred Werner, for linking up atoms within the molecule.	Charles Richet, for work on anaphylaxy.
1914	Max von Laue, for discovery of diffraction of Roentgen rays passing through crystals.	Theodore W. Richards, for determining atomic weight of many chemical elements.	Robert Bárány, for work on physiology and pathology of the vestibular system.
1915	W. H. Bragg and W. L. Bragg, for analysis of crystal structure by means of X rays.	Richard Willstätter, for research into coloring matter of plants, especially chlorophyll.	No award.
1917	Charles G. Barkla, discovery of Roentgen radiation of the elements.	No award.	No award.
1918	Max Planck, for discoveries in connection with quantum theory.	Fritz Haber, for synthetic production of ammonia.	No award.
1919	Johannes Stark, discovery of Doppler effect in Canal rays and decomposition of spectrum lines by electric fields.	No award.	Jules Bordet, for discoveries in connection with immunity.
1920	Charles E. Guillaume, for discoveries of anomalies in nickel steel alloys.	Walther Nernst, for work in thermochemistry.	August Krogh, discovery of regulation of capillaries' motor mechanism.
1921	Albert Einstein, for discovery of the law of the photoelectric effect.	Frederick Soddy, for investigations into origin and nature of isotopes.	No award.
1922	Niels Bohr, for investigations of structure of atoms and radiations emanating from them.	Francis W. Aston, for discovery of isotopes in nonradioactive elements and for discovery of the whole number rule.	In 1923 the 1922 prize was divided between Archibald V. Hill for discovery relating to heat-production in muscles; and Otto Meyerhof, for correlation between consumption of oxygen and production of lactic acid in muscles.
1923	Robert A. Millikan, work on elementary charge of electricity and photoelectric phenomena.	Fritz Pregl, for method of microanalysis of organic substances discovered by him.	Frederick G. Banting and John J. R. Macleod, for discovery of insulin.
1924	Karl M. G. Siegbahn, for investigations in X-ray spectroscopy.	No award.	Willem Einthoven, for discovering the mechanism of the electrocardiogram.
1925	James Franck and Gustav Hertz, for discovery of laws governing impact of electrons upon atoms.	In 1926 the 1925 prize was awarded to Richard Zsigmondy, for work on the heterogeneous nature of colloid solutions.	No award.
1926	Jean Perrin, for works on discontinuous structure of matter and discovery of the equilibrium of sedimentation.	The Svedberg, for work on disperse systems.	Johannes Fibiger, for discovery of the Spiroptera carcinoma.
1927	Arthur H. Compton, discovery of Compton phenomenon; and Charles T. R. Wilson, for method of perceiving paths taken by electrically charged particles.	In 1928 the 1927 prize was awarded to Heinrich Wieland, for investigations of bile acids and kindred substances.	Julius Wagner-Jauregg, for use of malaria inoculation in treatment of dementia paralytica.



Year	Physics	Chemistry	Medicine
1928	In 1929 the 1928 prize was awarded to Owen W. Richardson, for work on the phenomenon of thermionics and discovery of the Richardson Law.	Adolf Windaus, for investigations on constitution of the sterols and their connection with vitamins.	Charles Nicolle, for work on typhus exanthematicus.
1929	Prince Louis Victor de Broglie, for discovery of the wave character of electrons.	Arthur Harden and Hans K. A. S. von Euler-Chelpin, for research of fermentation of sugars.	Christiaan Eijkman, for discovery of the antineuritic vitamins; and Sir Frederick G. Hopkins, for discovery of growth-promoting vitamins.
1930	Sir Chandrasekhara V. Raman, for work on diffusion of light and discovery of the Raman effect.	Hans Fischer, for work on coloring matter of blood and leaves and for his synthesis of hemin.	Karl Landsteiner, for discovery of human blood groups.
1931	No award.	Karl Bosch and Friedrich Bergius, for invention and development of chemical high-pressure methods.	Otto H. Warburg, for discovery of the character and mode of action of the respiratory ferment.
1932	In 1933 the prize for 1932 was awarded to Werner Heisenberg, for creation of the quantum mechanics.	Irving Langmuir, for work in realm of surface chemistry.	Sir Charles S. Sherrington and Edgar D. Adrian, for discoveries of the function of the neuron.
1933	Erwin Schrödinger and Paul A. M. Dirac, for discovery of new fertile forms of the atomic theory.	No award.	Thomas H. Morgan, for discoveries on hereditary function of the chromosomes.
1934	No award.	Harold C. Urey, for discovery of heavy hydrogen.	George H. Whipple, George R. Minot, and William P. Murphy, for discovery of liver therapy against anemias.
1935	James Chadwick, for discovery of the neutron.	Frédéric and Irène Joliot-Curie, for synthesis of new radioactive elements.	Hans Spemann, for discovery of the organizer-effect in embryonic development.
1936	Victor F. Hess, for discovery of cosmic radiation; and Carl D. Anderson, for discovery of the positron.	Peter J. W. Debye, for investigations on dipole moments and diffraction of X rays and electrons in gases.	Sir Henry H. Dale and Otto Loewi, for discoveries on chemical transmission of nerve impulses.
1937	Clinton J. Davisson and George P. Thomson, for discovery of diffraction of electrons by crystals.	Walter N. Haworth, for research on carbohydrates and vitamin C; and Paul Karrer, for work on carotenoids, flavins and vitamins A and B.	Albert Szent-Györgyi von Nagyrapolt, for discoveries on biological combustion.
1938	Enrico Fermi, for identification of new radioactivity elements and discovery of nuclear reactions effected by slow neutrons.	Richard Kuhn, for carotenoid study and vitamin research (declined the prize).	Corneille Heymans, for importance of sinus and aorta mechanisms in the regulation of respiration.

Year	Physics	Chemistry	Medicine
1939	Ernest Orlando Lawrence, for the development of the cyclotron.	Adolf Friedrich Johann Butenandt, for work on sexual hormones (declined the prize) and Leopold Ružička, work with polymethylenes.	Gerhard Domagk, antibacterial effect of protocoilate.
1943	Otto Stern, for detection of magnetic momentum of protons.	George Hevesy De Heves, for work on use of isotopes as chemical indicators.	Henrik Dam, Edward A. Doisy for the discovery of the chemical nature of Vitamin K.
1944	Isidor Isaac Rabi, for work on magnetic movements of atomic particles.	Otto Hahn, for work on atomic fission.	Joseph Erlanger and Herbert Spencer Gasser, for work on functions of the nerve threads.
1945	Wolfgang Pauli, for work on atomic fissions.	Artturi Ilmari Virtanen, for research in the field of conservation of fodder.	Sir Alexander Fleming, Ernst Boris Chain, and Sir Howard Florey, for discovery of penicillin.
1946	Percy Williams Bridgman, studies and inventions in high-pressure physics.	James B. Sumner, crystallizing of enzymes. John H. Northrop and Wendell M. Stanley, preparing enzymes and virus proteins in pure form.	Herman J. Muller, hereditary effects of X ray on genes.
1947	Sir Edward Appleton, for discovery of layer which reflects radio short waves in the ionosphere.	Sir Robert Robinson, for research in plant substances.	Carl F. and Gerty T. Cori, for work on animal starch metabolism; Bernardo A. Houssay, for hormone study of pituitary gland.
1948	Patrick M. S. Blackett, for improvement on Wilson chamber, discoveries in cosmic radiation.	Arne Tiselius, for biochemical discoveries and isolation of mouse paralysis virus.	Paul Mueller, for discovery of insect-killing properties of DDT.
1949	Hideki Yukawa, for mathematical prediction, 14 years ago, of the meson.	William Francis Glauque, for research in thermodynamics, especially effects of low temperature.	Walter Rudolf Hess, for research on brain control of body; and Antonio Caetano de Abreu Freire Egas Moniz, for development of brain operation to treat mental disease.
1950	Cecil Frank Powell, for method of photographic study of atom nucleus, and for discoveries about mesons.	Otto Diels and Kurt Adler, for dien synthesis for artificial manufacture of odors and complicated compounds.	Philip S. Hench, Edward C. Kendall, and Tadeus Reichstein, for discoveries about hormones of adrenal cortex.
1951	Sir John Douglas Cockcroft and Ernest T. S. Walton, for work in 1932 on transmutation of atomic nuclei.	Glenn T. Seaborg and Edwin M. McMillan, for discovery of plutonium.	Max Theiler, for development of anti-yellow fever vaccine.
1952	Edward Mills Purcell and Felix Bloch, for work in measurement of magnetic fields in atomic nuclei.	Archer John Porter Martin and Richard Laurence Millington Synge, for development of the partition chromatography process (coloring, identifying, separating compounds).	Selman A. Waksman, for co-discovery of streptomycin.
1953	Fritz Zernike, for development of "phase contrast" microscope.	Hermann Staudinger, for research in giant molecules.	Fritz A. Lipmann and Hans Adolph Krebs, for studies of living cells.

(For 1954 Nobel Prize winners, see Nobel Prizes in index.)

## Pulitzer Prize Awards

Source: Columbia University, New York. (For years not listed, no award was made.)

### Pulitzer Prizes in Journalism

#### Meritorious Public Service

- 1918 *The New York Times*
- 1919 *Milwaukee Journal*
- 1921 *Boston Post*
- 1922 *The (N. Y.) World*
- 1923 *Memphis Commercial Appeal*
- 1924 *The (N. Y.) World*
- 1926 *The (Columbus, Ga.) Enquirer Sun*
- 1927 *Canton (Ohio) Daily News*
- 1928 *Indianapolis Times*
- 1929 *The (N. Y.) Evening World*
- 1931 *Atlanta Constitution*
- 1932 *Indianapolis News*
- 1933 *New York World-Telegram*
- 1934 *Medford (Oreg.) Mail Tribune*
- 1935 *The Sacramento Bee*
- 1936 *The Cedar Rapids (Iowa) Gazette*
- 1937 *St. Louis Post-Dispatch*
- 1938 *The Bismarck (N. Dak.) Tribune*  
Special Bronze Plaque:  
*Edmonton (Alberta) Journal*
- 1939 *The Miami Daily News*
- 1940 *Waterbury (Conn.) Republican and American*
- 1941 *St. Louis Post-Dispatch*
- 1942 *Los Angeles Times*
- 1943 *The (Omaha) World-Herald*
- 1944 *The New York Times*
- 1945 *The Detroit Free Press*
- 1946 *The Scranton (Pa.) Times*
- 1947 *The (Baltimore) Sun*
- 1948 *The St. Louis Post-Dispatch*
- 1949 *(Lincoln) Nebraska State Journal*
- 1950 *Chicago Daily News and The St. Louis Post-Dispatch*
- 1951 *The Miami Herald and The Brooklyn Eagle*
- 1952 *The St. Louis Post-Dispatch*
- 1953 *The Whiteville (N. C.) News Reporter*  
*The Tabor City (N. C.) Tribune*
- 1954 *(Garden City, L. I.) Newsday*

#### Editorial

- 1917 *New York Tribune*
- 1918 *The (Louisville, Ky.) Courier-Journal*
- 1920 HARVEY E. NEWBRANCH ([Omaha] *Evening World-Herald*)
- 1922 FRANK M. O'BRIEN (*The New York Herald*)
- 1923 WILLIAM ALLEN WHITE (*The Emporia [Kans.] Gazette*)
- 1924 *The Boston Herald*; Special prize:  
FRANK I. COBB (*The [N.Y.] World*)
- 1925 Charleston (S. C.) *News and Courier*
- 1926 *The New York Times* (EDWARD M. KINGSBURY)
- 1927 *The Boston Herald* (F. LAURISTON BULLARD)
- 1928 GROVER CLEVELAND HALL (*Montgomery [Ala.] Advertiser*)
- 1929 LOUIS ISAAC JAFFE (*Norfolk Virginian-Pilot*)
- 1931 CHARLES S. RYCKMAN (*Fremont [Nebr.] Tribune*)
- 1933 *The Kansas City (Mo.) Star*

- 1934 E. P. CHASE (*Atlantic [Iowa] News Telegraph*)
- 1936 FELIX MORLEY (*The Washington [D. C.] Post*); GEORGE B. PARKER (*The Scripps-Howard Newspapers*)
- 1937 JOHN W. OWENS (*The [Baltimore] Sun*)
- 1938 W. W. WAYMACK (*The [Des Moines] Register and Tribune*)
- 1939 RONALD G. CALLVERT (*The [Portland] Oregonian*)
- 1940 BART HOWARD (*St. Louis Post-Dispatch*)
- 1941 REUBEN MAURY ([N. Y.] *Daily News*)
- 1942 GEOFFREY PARSONS (*New York Herald Tribune*)
- 1943 FORREST W. SEYMOUR (*The [Des Moines] Register and Tribune*)
- 1944 *The Kansas City (Mo.) Star* (HENRY J. HASKELL)
- 1945 GEORGE W. POTTER (*The Providence [R. I.] Journal-Bulletin*)
- 1946 HODDING CARTER (*The [Greenville, Miss.] Delta Democrat-Times*)
- 1947 WILLIAM H. GRIMES (*The [N. Y.] Wall Street Journal*)
- 1948 VIRGINIUS DABNEY (*Richmond Times-Dispatch*)
- 1949 JOHN H. CRIDER (*The Boston Herald*)  
HERBERT ELLISTON (*The Washington Post*)
- 1950 CARL M. SAUNDERS (*Jackson [Mich.] Citizen Patriot*)
- 1951 WILLIAM H. FITZPATRICK (*The New Orleans States*)
- 1952 LOUIS LACOSS (*St. Louis Globe-Democrat*)
- 1953 VERMONT C. ROYSTER (*The Wall Street Journal*)
- 1954 DONALD M. MURRY (*Boston Herald*)

#### Correspondence

- 1929 PAUL SCOTT MOWRER (*Chicago Daily News*)
- 1930 LELAND STOWE (*New York Herald Tribune*)
- 1931 H. R. KNICKERBOCKER (*Philadelphia Public Ledger and New York Evening Post*)
- 1932 WALTER DURANTY (*The New York Times*); CHARLES G. ROSS (*St. Louis Post-Dispatch*)
- 1933 EDGAR ANSEL MOWRER (*Chicago Daily News*)
- 1934 FREDERICK T. BIRCHALL (*The New York Times*)
- 1935 ARTHUR KROCK (*The New York Times*)
- 1936 WILFRED C. BARBER (*The Chicago Tribune*)
- 1937 ANNE O'HARE MCCORMICK (*The New York Times*)
- 1938 ARTHUR KROCK (*The New York Times*)
- 1939 LOUIS P. LOCHNER (*The Associated Press*)



- 1940 OTTO D. TOLISCHUS (*The New York Times*)  
 1941 Group award\*  
 1942 CARLOS P. ROMULO (*The [Manila] Philippines Herald*)  
 1943 HANSON W. BALDWIN (*The New York Times*)  
 1944 ERNIE PYLE (Scripps-Howard Newspaper Alliance)  
 1945 HAROLD V. (HAL) BOYLE (The Associated Press)  
 1946 ARNALDO CORTESI (*New York Times*)  
 1947 BROOKS ATKINSON (*New York Times*)  
 1948 Discontinued

\* For the public services and the individual achievements of American news reporters in the war zones.

### Cartoon

- 1922 ROLLIN KIRBY (*The [N. Y.] World*)  
 1924 JAY NORWOOD DARLING (*New York Tribune*)  
 1925 ROLLIN KIRBY (*The [N. Y.] World*)  
 1926 D. R. FITZPATRICK (*St. Louis Post-Dispatch*)  
 1927 NELSON HARDING (*Brooklyn Daily Eagle*)  
 1928 NELSON HARDING (*Brooklyn Daily Eagle*)  
 1929 ROLLIN KIRBY (*The [N. Y.] World*)  
 1930 CHARLES R. MACAULEY (*Brooklyn Daily Eagle*)  
 1931 EDMUND DUFFY (*The [Baltimore] Sun*)  
 1932 JOHN T. MCCUTCHEON (*The Chicago Tribune*)  
 1933 HAROLD MORTON TALBURT (*Washington Daily News*)  
 1934 EDMUND DUFFY (*The [Baltimore] Sun*)  
 1935 ROSS A. LEWIS (*Milwaukee Journal*)  
 1937 CLARENCE DANIEL BATCHELOR ([N. Y.] *Daily News*)  
 1938 VAUGHN SHOEMAKER (*Chicago Daily News*)  
 1939 CHARLES G. WERNER (*The [Oklahoma City] Daily Oklahoman*)  
 1940 EDMUND DUFFY (*The [Baltimore] Sun*)  
 1941 JACOB BURCK (*The [Chicago] Times*)  
 1942 HERBERT L. BLOCK (NEA Service)  
 1943 JAY NORWOOD DARLING (*New York Herald Tribune*)  
 1944 CLIFFORD K. BERRYMAN (*The Washington [D. C.] Evening Star*)  
 1945 BILL MAULDIN (United Feature Syndicate, Inc.)  
 1946 BRUCE ALEXANDER RUSSELL (*Los Angeles Times*)  
 1947 VAUGHN SHOEMAKER (*Chicago Daily News*)  
 1948 RUBE GOLDBERG (*The [N. Y.] Sun*)  
 1949 LUTE PEASE (*Newark Evening News*)  
 1950 JAMES T. BERRYMAN (*Washington [D. C.] Evening Star*)  
 1951 REG (REGINALD W.) MANNING (*The [Phoenix] Arizona Republic*)  
 1952 FRED L. PACKER (*The [N. Y.] Mirror*)  
 1953 EDWARD D. KUEKES (*The Cleveland Plain Dealer*)

- 1954 HERBERT L. BLOCK (*The Washington [D. C.] Post*)

### News Photography

- 1942 MILTON BROOKS (*The Detroit News*)  
 1943 FRANK NOEL (The Associated Press)  
 1944 FRANK FILAN (The Associated Press)  
 EARLE L. BUNKER (*The [Omaha] World-Herald*)  
 1945 JOE ROSENTHAL (The Associated Press)  
 1947 ARNOLD HARDY  
 1948 FRANK CUSHING (*Boston Traveler*)  
 1949 NAT FEIN (*N. Y. Herald Tribune*)  
 1950 BILL CROUCH (*Oakland Tribune*)  
 1951 MAX DESFOR (The Associated Press)  
 1952 JOHN ROBINSON and DON ULTANG (*Des Moines Register and Tribune*)  
 1953 WILLIAM M. GALLAGHER (*The Flint [Mich.] Journal*)  
 1954 MRS. WALTER M. SCHAU

### National Telegraphic Reporting

- 1942 LOUIS STARK (*The New York Times*)  
 1944 DEWEY L. FLEMING (*The [Baltimore] Sun*)  
 1945 JAMES B. RESTON (*The New York Times*)  
 1946 EDWARD A. HARRIS (*St. Louis Post-Dispatch*)  
 1947 EDWARD T. FOLLIARD (*The Washington [D. C.] Post*)

### National Reporting

- 1948 BERT ANDREWS (*New York Herald Tribune*); NAT S. FINNY (*The Minneapolis Tribune*)  
 1949 C. P. TRUSSELL (*The N. Y. Times*)  
 1950 EDWIN O. GUTHMAN (*Seattle Times*)  
 1952 ANTHONY LEVIERO (*The N. Y. Times*)  
 1953 DON WHITEHEAD (Associated Press)  
 1954 RICHARD L. WILSON (The Cowles Newspapers)

### International Telegraphic Reporting

- 1942 LAURENCE EDMUND ALLEN (The Associated Press)  
 1943 IRA WOLFERT (North American Newspaper Alliance, Inc.)  
 1944 DANIEL DE LUCE (The Associated Press)  
 1945 MARK S. WATSON (*The [Baltimore] Sun*)  
 1946 HOMER W. BIGART (*New York Herald Tribune*)  
 1947 EDDY GILMORE (The Associated Press)

### International Reporting

- 1948 PAUL W. WARD (*The [Baltimore] Sun*)  
 1949 PRICE DAY (*The [Baltimore] Sun*)  
 1950 EDMUND STEVENS (*Christian Science Monitor*)  
 1951 KEYES BEECH and FRED SPARKS (*Chicago Daily News*); HOMER BIGART and MARGUERITE HIGGINS (*N.Y. Herald Tribune*); RELMAN MORIN and DON WHITEHEAD (The Associated Press)  
 1952 JOHN M. HIGHTOWER (The Associated Press)

- 1953 AUSTIN C. WEHRWEIN (*The Milwaukee Journal*)  
 1954 JIM G. LUCAS (*The Scripps-Howard Newspapers*)

## Reporting

- 1917 HERBERT B. SWOPE ([N. Y.] *World*)  
 1918 HAROLD A. LITLEDAL (*New York Evening Post*)  
 1920 JOHN J. LEARY, JR. (*The [N. Y.] World*)  
 1921 LOUIS SEIBOLD (*The [N. Y.] World*)  
 1922 KIRKE L. SIMPSON (*The Associated Press*)  
 1923 ALVA JOHNSTON (*New York Times*)  
 1924 MAGNER WHITE (*San Diego Sun*)  
 1925 JAMES W. MULROY and ALVIN H. GOLDSTEIN (*Chicago Daily News*)  
 1926 WILLIAM BURKE MILLER (*The [Louisville, Ky.] Courier-Journal*)  
 1927 JOHN T. ROGERS (*St. Louis Post-Dispatch*)  
 1929 PAUL Y. ANDERSON (*St. Louis Post-Dispatch*)  
 1930 RUSSELL D. OWEN (*The New York Times*); Special award: W. O. DAPPING (*Auburn [N. Y.] Citizen*)  
 1931 A. B. MACDONALD (*The Kansas City [Mo.] Star*)  
 1932 W. C. RICHARDS, D. D. MARTIN, J. S. POOLER, F. D. WEBB, J. N. W. SLOAN (all of *The Detroit Free Press*)  
 1933 FRANCIS A. JAMIESON (*The Associated Press*)  
 1934 ROYCE BRIER (*San Francisco Chronicle*)  
 1935 WILLIAM H. TAYLOR (*New York Herald Tribune*)  
 1936 LAUREN D. LYMAN (*The New York Times*)  
 1937 JOHN J. O'NEILL (*New York Herald Tribune*), WILLIAM LEONARD LAURENCE (*The New York Times*), HOWARD W. BLAKESLEE (*The Associated Press*), GOBIND BEHARI LAL (Universal Service), DAVID DIETZ (*The Scripps-Howard Newspapers*)  
 1938 RAYMOND SPRIGLE (*Pittsburgh Post-Gazette*)  
 1939 THOMAS L. STOKES (*New York World-Telegram*)  
 1940 S. BURTON HEATH (*New York World-Telegram*)  
 1941 WESTBROOK PEGLER (*New York World-Telegram*)  
 1942 STANTON DELAPLANE (*San Francisco Chronicle*)  
 1943 GEORGE WELLER (*Chicago Daily News*)  
 1944 PAUL SCHOENSTEIN and associates (*New York Journal-American*)  
 1945 JACK S. McDOWELL (*The [San Francisco] Call-Bulletin*)  
 1946 WILLIAM LEONARD LAURENCE (*The New York Times*)  
 1947 FREDERICK WOLTMAN (*New York World-Telegram*)

## Local Reporting

- 1948 GEORGE E. GOODWIN (*The Atlanta Journal*)

- 1949 MALCOLM JOHNSON (*The [N. Y.] Sun*)  
 1950 MEYER BERGER (*The New York Times*)  
 1951 EDWARD S. MONTGOMERY (*The San Francisco Examiner*)  
 1952 GEORGE DE CARVALHO (*The San Francisco Chronicle*)  
 1953 Reporting and photographic staffs (*The Providence Journal and Evening Bulletin*); EDWARD J. MOWERY (*New York World-Telegram and Sun*)  
 1954 *The Vicksburg (Miss.) Sunday Post-Herald*; ALVIN SCOTT MCCOY (*The Kansas City [Mo.] Star*)

## Special Citation

- 1941 *The New York Times* for the public educational value of its foreign news report.  
 1944 BYRON PRICE, Director of the Office of Censorship, for the creation and administration of the newspaper and radio codes.  
 1945 MRS. WILLIAM ALLEN WHITE, for her husband's interest and services during the past seven years as a member of the Advisory Board of the Graduate School of Journalism, Columbia University. The cartographers of the American press for their war maps.  
 1947 (Pulitzer centennial year.) Columbia University and the Graduate School of Journalism, for their efforts to maintain and advance the high standards governing the Pulitzer Prize awards. The *St. Louis Post-Dispatch*, for its unswerving adherence to the public and professional ideals of its founder and its leadership in the field of American journalism.  
 1948 DR. FRANK D. FACKENTHAL, for his interest and service.  
 1951 CYRUS L. SULZBERGER (*The New York Times*) for his exclusive interview with Archbishop Stepinatz in a Yugoslav prison.  
 1952 *The Kansas City Star* for coverage of 1951 floods; MAX KASE (*New York Journal-American*) for exposures of bribery in college basketball.  
 1953 *The New York Times* for its 17-year publication of "News of the Week in Review."

## History of Services Rendered Public by American Press in Preceding Year

- 1918 MINNA LEWISON, HENRY B. HOUGH

## Pulitzer Prizes in Letters

## Novel

- 1918 *His Family*. By ERNEST POOLE  
 1919 *The Magnificent Ambersons*. By BOOTH TARKINGTON  
 1921 *The Age of Innocence*. By EDITH WHARTON  
 1922 *Alice Adams*. By BOOTH TARKINGTON

- 1923 *One of Ours*. By WILLA CATHER  
 1924 *The Able McLaughlins*. By MARGARET WILSON  
 1925 *So Big*. By EDNA FERBER  
 1926 *Arrowsmith*. By SINCLAIR LEWIS  
 1927 *Early Autumn*. By LOUIS BROMFIELD  
 1928 *The Bridge of San Luis Rey*. By THORNTON WILDER  
 1929 *Scarlet Sister Mary*. By JULIA PETERKIN  
 1930 *Laughing Boy*. By OLIVER LA FARGE  
 1931 *Years of Grace*. By MARGARET AYER BARNES  
 1932 *The Good Earth*. By PEARL S. BUCK  
 1933 *The Store*. By T. S. STRIBLING  
 1934 *Lamb in His Bosom*. By CAROLINE MILLER  
 1935 *Now in November*. By JOSEPHINE WINSLOW JOHNSON  
 1936 *Honey in the Horn*. By HAROLD L. DAVIS  
 1937 *Gone With the Wind*. By MARGARET MITCHELL  
 1938 *The Late George Apley*. By JOHN PHILLIPS MARQUAND  
 1939 *The Yearling*. By MARJORIE KINNAN RAWLINGS  
 1940 *The Grapes of Wrath*. By JOHN STEINBECK  
 1942 *In This Our Life*. By ELLEN GLASGOW  
 1943 *Dragon's Teeth*. By UPTON SINCLAIR  
 1944 *Journey in the Dark*. By MARTIN FLAVIN  
 1945 *A Bell for Adano*. By JOHN HERSEY  
 1947 *All the King's Men*. By ROBERT PENN WARREN  
 1948 *Tales of the South Pacific*. By JAMES A. MICHENER  
 1949 *Guard of Honor*. By JAMES GOULD COZZENS  
 1950 *The Way West*. By A. B. GUTHRIE, JR.  
 1951 *The Town*. By CONRAD RICHTER  
 1952 *The Caine Mutiny*. By HERMAN WOUK  
 1953 *The Old Man and the Sea*. By ERNEST HEMINGWAY  
 1954 (No award)

## Drama

- 1918 *Why Marry?* By JESSE LYNCH WILLIAMS  
 1920 *Beyond the Horizon*. By EUGENE O'NEILL  
 1921 *Miss Lulu Bett*. By ZONA GALE  
 1922 *Anna Christie*. By EUGENE O'NEILL  
 1923 *Icebound*. By OWEN DAVIS  
 1924 *Hell-Bent For Heaven*. By HATCHER HUGHES  
 1925 *They Knew What They Wanted*. By SIDNEY HOWARD  
 1926 *Craig's Wife*. By GEORGE KELLY  
 1927 *In Abraham's Bosom*. By PAUL GREEN  
 1928 *Strange Interlude*. By EUGENE O'NEILL  
 1929 *Street Scene*. By ELMER L. RICE  
 1930 *The Green Pastures*. By MARC CONNELLY  
 1931 *Alison's House*. By SUSAN GLASPELL  
 1932 *Of Thee I Sing*. By GEORGE S. KAUFMAN, MORRIE RYSKIND & IRA GERSHWIN

- 1933 *Both Your Houses*. By MAXWELL ANDERSON  
 1934 *Men in White*. By SIDNEY KINGSLEY  
 1935 *The Old Maid*. By ZOE AKINS  
 1936 *Idiot's Delight*. By ROBERT E. SHERWOOD  
 1937 *You Can't Take It With You*. By MOSS HART and GEORGE S. KAUFMAN  
 1938 *Our Town*. By THORNTON WILDER  
 1939 *Abe Lincoln in Illinois*. By ROBERT E. SHERWOOD  
 1940 *The Time of Your Life*. By WILLIAM SAROYAN  
 1941 *There Shall Be No Night*. By ROBERT E. SHERWOOD  
 1943 *The Skin of Our Teeth*. By THORNTON WILDER  
 1945 *Harvey*. By MARY CHASE  
 1946 *State of the Union*. By RUSSEL CROUSE and HOWARD LINDSAY  
 1948 *A Streetcar Named Desire*. By TENNESSEE WILLIAMS  
 1949 *Death of a Salesman*. By ARTHUR MILLER  
 1950 *South Pacific*. By RICHARD RODGERS, OSCAR HAMMERSTEIN II, and JOSHUA LOGAN  
 1952 *The Shrike*. By JOSEPH KRAMM  
 1953 *Picnic*. By WILLIAM INGE  
 1954 *The Teahouse of the August Moon*. By JOHN PATRICK

## United States History

- 1917 *With Americans of Past and Present Days*. By J. J. JUSSERAND, Ambassador of France to U. S.  
 1918 *A History of the Civil War, 1861-1865*. By JAMES FORD RHODES  
 1920 *The War with Mexico*. By JUSTIN H. SMITH  
 1921 *The Victory at Sea*. By WILLIAM SOWDEN SIMS in collaboration with BURTON J. HENDRICK  
 1922 *The Founding of New England*. By JAMES TRUSLOW ADAMS  
 1923 *The Supreme Court in United States History*. By CHARLES WARREN  
 1924 *The American Revolution—A Constitutional Interpretation*. By CHARLES HOWARD MCLWAIN  
 1925 *A History of the American Frontier*. By FREDERIC L. PAXSON  
 1926 *The History of the United States*. By EDWARD CHANNING  
 1927 *Pinkney's Treaty*. By SAMUEL FLAGG BEMIS  
 1928 *Main Currents in American Thought*, 2 vols. By VERNON LOUIS PARRINGTON  
 1929 *The Organization and Administration of the Union Army, 1861-1865*. By FRED ALBERT SHANNON  
 1930 *The War of Independence*. By CLAUDE H. VAN TYNE  
 1931 *The Coming of the War: 1914*. By BERNADOTTE E. SCHMITT  
 1932 *My Experiences in the World War*. By JOHN J. PERSHING  
 1933 *The Significance of Sections in American History*. By FREDERICK J. TURNER



- 1934 *The People's Choice*. By HERBERT AGAR  
 1935 *The Colonial Period of American History*. By CHARLES MCLEAN ANDREWS  
 1936 *The Constitutional History of the U. S.* By ANDREW C. McLAUGHLIN  
 1937 *The Flowering of New England*. By VAN WYCK BROOKS  
 1938 *The Road to Reunion, 1865-1900*. By PAUL HERMAN BUCK  
 1939 *A History of American Magazines*. By FRANK LUTHER MOTT  
 1940 *Abraham Lincoln: The War Years*. By CARL SANDBURG  
 1941 *The Atlantic Migration, 1607-1860*. By MARCUS LEE HANSEN  
 1942 *Reveille in Washington*. By MARGARET LEECH  
 1943 *Paul Revere and the World He Lived In*. By ESTHER FORBES  
 1944 *The Growth of American Thought*. By MERLE CURTI  
 1945 *Unfinished Business*. By STEPHEN BONSAI  
 1946 *The Age of Jackson*. By ARTHUR M. SCHLESINGER, JR.  
 1947 *Scientists Against Time*. By JAMES PHINNEY BAXTER, 3RD  
 1948 *Across the Wide Missouri*. By BERNARD DEVOTO  
 1949 *The Disruption of American Democracy*. By ROY FRANKLIN NICHOLS  
 1950 *Art and Life in America*. By OLIVER W. LARKIN  
 1951 *The Old Northwest, Pioneer Period 1815-1840, Vols. I and II*. By R. CARLYLE BULEY  
 1952 *The Uprooted*. By OSCAR HANDLIN  
 1953 *The Era of Good Feelings*. By GEORGE DANGERFIELD  
 1954 *A Stillness at Appomattox*. By BRUCE CATTON

## Biography

- 1917 *Julia Ward Howe*. By LAURA E. RICHARDS and MAUDE HOWE ELLIOTT assisted by FLORENCE HOWE HALL  
 1918 *Benjamin Franklin, Self-Revealed*. By WILLIAM CABELL BRUCE  
 1919 *The Education of Henry Adams*. By HENRY ADAMS  
 1920 *The Life of John Marshall*. By ALBERT J. BEVERIDGE  
 1921 *The Americanization of Edward Bok*. By EDWARD BOK  
 1922 *A Daughter of the Middle Border*. By HAMLIN GARLAND  
 1923 *The Life and Letters of Walter H. Page*. By BURTON J. HENDRICK  
 1924 *From Immigrant to Inventor*. By MICHAEL IDVORSKY PUPIN  
 1925 *Barrett Wendell and His Letters*. By M. A. DEWOLFE HOWE  
 1926 *The Life of Sir William Osler*. By HARVEY CUSHING  
 1927 *Whitman*. By EMORY HOLLOWAY  
 1928 *The American Orchestra and Theodore Thomas*. By CHARLES EDWARD RUSSELL  
 1929 *The Training of an American. The Earlier Life and Letters of Walter H. Page*. By BURTON J. HENDRICK  
 1930 *The Raven*. By MARQUIS JAMES  
 1931 *Charles W. Eliot*. By HENRY JAMES  
 1932 *Theodore Roosevelt*. By HENRY F. PRINGLE  
 1933 *Grover Cleveland*. By ALLAN NEVINS  
 1934 *John Hay*. By TYLER DENNETT  
 1935 *R. E. Lee*. By DOUGLAS S. FREEMAN  
 1936 *The Thought and Character of William James*. By RALPH BARTON PERRY  
 1937 *Hamilton Fish*. By ALLAN NEVINS  
 1938 *Pedlar's Progress*. By ODELL SHEPARD  
 1939 *Andrew Jackson*. By MARQUIS JAMES  
 1939 *Benjamin Franklin*. By CARL VAN DOREN  
 1940 *Woodrow Wilson. Life and Letters, Vols. VII and VIII*. By RAY STANNARD BAKER  
 1941 *Jonathan Edwards*. By OLA ELIZABETH WINSLOW  
 1942 *Crusader in Crinoline*. By FORREST WILSON  
 1943 *Admiral of the Ocean Sea*. By SAMUEL ELIOT MORISON  
 1944 *The American Leonardo: The Life of Samuel F. B. Morse*. By CARLTON MABEE  
 1945 *George Bancroft: Brahmin Rebel*. By RUSSEL BLAINE NYE  
 1946 *Son of the Wilderness*. By LINNIE MARSH WOLFE  
 1947 *The Autobiography of William Allen White*  
 1948 *Forgotten First Citizen: John Bigelow*. By MARGARET CLAPP  
 1949 *Roosevelt and Hopkins*. By ROBERT E. SHERWOOD  
 1950 *John Quincy Adams and the Foundations of American Foreign Policy*. By SAMUEL FLAGG BEMIS  
 1951 *John C. Calhoun: American Portrait*. By MARGARET LOUISE COIT  
 1952 *Charles Evans Hughes*. By MERLO J. PUSEY  
 1953 *Edmund Pendleton 1721-1803*. By DAVID J. MAYES  
 1954 *The Spirit of St. Louis*. By CHARLES A. LINDBERGH

## Poetry

- 1918\* *Love Songs*. By SARA TEASDALE  
 1919\* *Old Road to Paradise*. By MARGARET WIDDEMER  
*Corn Huskers*. By CARL SANDBURG  
 1922 *Collected Poems*. By EDWIN ARLINGTON ROBINSON  
 1923 *The Ballad of the Harp-Weaver; A Few Figs from Thistles; Eight Sonnets in American Poetry, 1922, A Miscellany*. By EDNA ST. VINCENT MILLAY  
 1924 *New Hampshire: A Poem with Notes and Grace Notes*. By ROBERT FROST  
 1925 *The Man Who Died Twice*. By EDWIN ARLINGTON ROBINSON  
 1926 *What's O'Clock*. By AMY LOWELL  
 1927 *Fiddler's Farewell*. By LEONORA SPEYER

\* Previous to the establishment of this prize in 1922, the 1918 and 1919 awards were made from gifts provided by the Poetry Society.

- 1928 *Tristram*. By EDWIN ARLINGTON ROBINSON  
 1929 *John Brown's Body*. By STEPHEN VINCENT BENÉT  
 1930 *Selected Poems*. By CONRAD AIKEN  
 1931 *Collected Poems*. By ROBERT FROST  
 1932 *The Flowering Stone*. By GEORGE DILLON  
 1933 *Conquistador*. By ARCHIBALD MACLEISH  
 1934 *Collected Verse*. By ROBERT HILLYER  
 1935 *Bright Ambush*. By AUDREY WURDEMAN  
 1936 *Strange Holiness*. By ROBERT P. TRISTRAM COFFIN  
 1937 *A Further Range*. By ROBERT FROST  
 1938 *Cold Morning Sky*. By MARYA ZATUR-ENSKA  
 1939 *Selected Poems*. By JOHN GOULD FLETCHER  
 1940 *Collected Poems*. By MARK VAN DOREN  
 1941 *Sunderland Capture*. By LEONARD BACON  
 1942 *The Dust Which Is God*. By WILLIAM ROSE BENÉT  
 1943 *A Witness Tree*. By ROBERT FROST  
 1944 *Western Star*. By STEPHEN VINCENT BENÉT  
 1945 *V-Letter and Other Poems*. By KARL SHAPIRO  
 1947 *Lord Weary's Castle*. By ROBERT LOWELL  
 1948 *The Age of Anxiety*. By W. H. AUDEN  
 1949 *Terror and Decorum*. By PETER VIERECK

- 1950 *Annie Allen*. By GWENDOLYN BROOKS  
 1951 *Complete Poems*. By CARL SANDBURG  
 1952 *Collected Poems*. By MARIANNE MOORE  
 1953 *Collected Poems, 1917-52*. By ARCHIBALD MACLEISH  
 1954 *The Waking: Poems 1933-1953*. By THEODORE ROETHKE

## Music

- 1943 *Secular Cantata No. 2, A Free Song*. By WILLIAM SCHUMAN  
 1944 *Symphony No. 4 (Op. 34)*. By HOWARD HANSON  
 1945 *Appalachian Spring*. By AARON COPLAND  
 1946 *The Canticle of the Sun*. By LEO SOWERBY  
 1947 *Symphony No. 3*. By CHARLES IVES  
 1948 *Symphony No. 3*. By WALTER PISTON  
 1949 *Louisiana Story* music. By VIRGIL THOMSON  
 1950 *The Consul*. By GIAN-CARLO MENOTTI  
 1951 *Music for opera Giants in the Earth*. By DOUGLAS STUART MOORE  
 1952 *Symphony Concertante*. By GAIL KUBICK  
 1954 *Concerto for Two Pianos and Orchestra*. By QUINCY PORTER

## Special Award

- 1944 *Oklahoma!* By RICHARD RODGERS and OSCAR HAMMERSTEIN, 2ND

## List of Academy Awards for Production, Acting, and Direction

## PRODUCTION

- | Year |  |
|------|--|
| 1928 | <i>Wings</i> , Paramount                               |
| 1929 | <i>The Broadway Melody</i> , M-G-M                     |
| 1930 | <i>All Quiet on the Western Front</i> , Universal      |
| 1931 | <i>Cimarron</i> , RKO Radio                            |
| 1932 | <i>Grand Hotel</i> , M-G-M                             |
| 1933 | <i>Cavalcade</i> , Fox                                 |
| 1934 | <i>It Happened One Night</i> , Columbia                |
| 1935 | <i>Mutiny on the Bounty</i> , M-G-M                    |
| 1936 | <i>The Great Ziegfeld</i> , M-G-M                      |
| 1937 | <i>The Life of Emile Zola</i> , Warner                 |
| 1938 | <i>You Can't Take It With You</i> , Col.               |
| 1939 | <i>Gone With the Wind</i> , Selznick-M-G-M             |
| 1940 | <i>Rebecca</i> , Selznick-UA                           |
| 1941 | <i>How Green Was My Valley</i> , 20th Century-Fox      |
| 1942 | <i>Mrs. Miniver</i> , M-G-M                            |
| 1943 | <i>Casablanca</i> , Warner Bros.                       |
| 1944 | <i>Going My Way</i> , Paramount                        |
| 1945 | <i>The Lost Weekend</i> , Paramount                    |
| 1946 | <i>The Best Years of Our Lives</i> , Goldwyn-RKO Radio |
| 1947 | <i>Gentleman's Agreement</i> , 20th Century-Fox        |
| 1948 | <i>Hamlet</i> , Rank-Two Cities-U-I                    |
| 1949 | <i>All the King's Men</i> , Rossen-Columbia            |

## DIRECTOR AND MOVIE

- |   |  |
|---|--|
| Frank Borzage, <i>Seventh Heaven</i> ;<br>Lewis Milestone, <i>Two Arabian Nights</i><br>Frank Lloyd, <i>The Divine Lady</i><br>Lewis Milestone, <i>All Quiet on the Western Front</i><br>Norman Taurog, <i>Skippy</i><br>Frank Borzage, <i>Bad Girl</i><br>Frank Lloyd, <i>Cavalcade</i><br>Frank Capra, <i>It Happened One Night</i><br>John Ford, <i>The Informer</i><br>Frank Capra, <i>Mr. Deeds Goes to Town</i><br>Leo McCarey, <i>The Awful Truth</i><br>Frank Capra, <i>You Can't Take It With You</i><br>Victor Fleming, <i>Gone With the Wind</i> | John Ford, <i>The Grapes of Wrath</i><br>John Ford, <i>How Green Was My Valley</i>                   |
| William Wyler, <i>Mrs. Miniver</i><br>Michael Curtiz, <i>Casablanca</i><br>Leo McCarey, <i>Going My Way</i><br>Billy Wilder, <i>The Lost Weekend</i><br>William Wyler, <i>The Best Years of Our Lives</i><br>Elia Kazan, <i>Gentleman's Agreement</i>   | John Huston, <i>Treasure of Sierra Madre</i><br>Joseph L. Mankiewicz, <i>A Letter to Three Wives</i> |

- 1950 *All About Eve*, 20th Century-Fox  
 1951 *An American in Paris*, M-G-M  
 1952 *The Greatest Show on Earth*, Paramount  
 1953 *From Here to Eternity*, Columbia

## ACTRESS AND MOVIE

- 1928 Janet Gaynor, *Seventh Heaven*,  
*Street Angel*, *Sunrise*  
 1929 Mary Pickford, *Coquette*  
 1930 Norma Shearer, *The Divorcee*  
 1931 Marie Dressler, *Min and Bill*  
 1932 Helen Hayes, *The Sin of Madelon*  
*Claudette*  
 1933 Katharine Hepburn, *Morning Glory*  
 1934 Claudette Colbert, *It Happened One*  
*Night*  
 1935 Bette Davis, *Dangerous*  
 1936 Luise Rainer, *The Great Ziegfeld*  
 1937 Luise Rainer, *The Good Earth*  
 1938 Bette Davis, *Jezebel*  
 1939 Vivien Leigh, *Gone With the Wind*  
 1940 Ginger Rogers, *Kitty Foyle*  
 1941 Joan Fontaine, *Suspicion*  
 1942 Greer Garson, *Mrs. Miniver*  
 1943 Jennifer Jones, *The Song of Berna-*  
*dette*  
 1944 Ingrid Bergman, *Gaslight*  
 1945 Joan Crawford, *Mildred Pierce*  
 1946 Olivia de Havilland, *To Each His*  
*Own*  
 1947 Loretta Young, *Farmer's Daughter*  
 1948 Jane Wyman, *Johnny Belinda*  
 1949 Olivia de Havilland, *The Heiress*  
 1950 Judy Holliday, *Born Yesterday*  
 1951 Vivien Leigh, *A Streetcar Named*  
*Desire*  
 1952 Shirley Booth, *Come Back, Little*  
*Sheba*  
 1953 Audrey Hepburn, *Roman Holiday*

## ACTRESS (SUPPORTING ROLE)

- 1936 Gale Sondergaard, *Anthony Adverse*  
 1937 Alice Brady, *In Old Chicago*  
 1938 Fay Bainter, *Jezebel*  
 1939 Hattie McDaniel, *Gone With the*  
*Wind*  
 1940 Jane Darwell, *The Grapes of Wrath*  
 1941 Mary Astor, *The Great Lie*  
 1942 Teresa Wright, *Mrs. Miniver*  
 1943 Katina Paxinou, *For Whom the Bell*  
*Tolls*  
 1944 Ethel Barrymore, *None But the*  
*Lonely Heart*  
 1945 Anne Revere, *National Velvet*  
 1946 Anne Baxter, *The Razor's Edge*  
 1947 Celeste Holm, *Gentleman's Agree-*  
*ment*  
 1948 Claire Trevor, *Key Largo*  
 1949 Mercedes McCambridge, *All the*  
*King's Men*  
 1950 Josephine Hull, *Harvey*  
 1951 Kim Hunter, *A Streetcar Named*  
*Desire*  
 1952 Gloria Grahame, *The Bad and the*  
*Beautiful*  
 1953 Donna Reed, *From Here to Eternity*

Joseph L. Mankiewicz, *All About Eve*  
 George Stevens, *A Place in the Sun*  
 John Ford, *The Quiet Man*

Fred Zinnemann, *From Here to Eternity*

## ACTOR AND MOVIE

Emil Jannings, *The Way of All Flesh*, *The*  
*Last Command*  
 Warner Baxter, *In Old Arizona*  
 George Arliss, *Disraeli*  
 Lionel Barrymore, *A Free Soul*  
 Fredric March, *Dr. Jekyll and Mr. Hyde*  
 Charles Laughton, *Henry VII*  
 Clark Gable, *It Happened One Night*  
 Victor McLaglen, *The Informer*  
 Paul Muni, *The Story of Louis Pasteur*  
 Spencer Tracy, *Captains Courageous*  
 Spencer Tracy, *Boys Town*  
 Robert Donat, *Goodbye, Mr. Chips*  
 James Stewart, *The Philadelphia Story*  
 Gary Cooper, *Sergeant York*  
 James Cagney, *Yankee Doodle Dandy*  
 Paul Lukas, *Watch on the Rhine*

Bing Crosby, *Going My Way*  
 Ray Milland, *The Lost Weekend*  
 Fredric March, *The Best Years of Our*  
*Lives*

Ronald Colman, *A Double Life*  
 Sir Laurence Olivier, *Hamlet*  
 Broderick Crawford, *All the King's Men*  
 Jose Ferrer, *Cyrano de Bergerac*  
 Humphrey Bogart, *The African Queen*

Gary Cooper, *High Noon*

William Holden, *Stalag 17*

## ACTOR (SUPPORTING ROLE)

Walter Brennan, *Come and Get It*  
 Joseph Schildkraut, *The Life of Emile Zola*  
 Walter Brennan, *Kentucky*  
 Thomas Mitchell, *Stagecoach*

Walter Brennan, *The Westerner*  
 Donald Crisp, *How Green Was My Valley*  
 Van Heflin, *Johnny Eager*  
 Charles Coburn, *The More the Merrier*

Barry Fitzgerald, *Going My Way*

James Dunn, *A Tree Grows in Brooklyn*  
 Harold Russell, *The Best Years of Our*  
*Lives*

Edmund Gwenn, *Miracle on 34th Street*

Walter Huston, *The Treasure of Sierra*  
*Madre*

Dean Jagger, *Twelve O'Clock High*

George Sanders, *All About Eve*  
 Karl Malden, *A Streetcar Named Desire*

Anthony Quinn, *Viva Zapata!*

Frank Sinatra, *From Here to Eternity*



## Other Academy Awards for 1953

Art direction (black and white): Cedric Gibbons, Edward Carfango, *Julius Caesar*.

Art direction (color): Lyle Wheeler, George W. Davis, *The Robe*.

Cinematography (black and white): Burnett Guffy, *From Here to Eternity*.

Cinematography (color): Loyal Griggs, *Shane*.

Costume design (black and white): Edith Head, *Roman Holiday*.

Costume design (color): Charles Le Maire, Emil Santiago, *The Robe*.

Documentary (feature): *The Living Desert*, Walt Disney-Buena Vista.

Documentary (short subject): *The Alaskan Eskimo*, Walt Disney-RKO Radio.

Film editing: William Lyon, *From Here to Eternity*.

Honorary awards: Joseph I. Breen, Production Code Administration; Spyros Skouras, 20th Century-Fox; Pete Smith; Bell and Howell Co.

Irving G. Thalberg Memorial Award: George Stevens.

Music (score of drama or comedy): Bronislau Kaper, *Lili*.

Music (score of musical picture): Alfred Newman, *Call Me Madam*.

Music (song): "Secret Love" from *Calamity Jane*.

Set decoration (black and white): Edwin B. Willis, Hugh Hunt, *Julius Caesar*.

Set decoration (color): Walter M. Scott, Paul S. Fox, *The Robe*.

Short subject (cartoon): *Toot, Whistle, Plunk and Boom*, Walt Disney-Buena Vista.

Short subject (1-reel): *Merry Wives of Windsor Overture*, MGM-Johnny Green.

Short subject (2-reel): *Bear Country*, Walt Disney-RKO Radio.

Sound recording: John P. Livadary, *From Here to Eternity*.

Special effects: *The War of the Worlds*, Paramount.

Technical awards (Class 1): Henri Chretien, Earl Sponable, Sol Halprin, Lorin Grignon, Herbert Bragg, Carl Faulkner of 20th Century-Fox for CinemaScope; Fred Waller for Cinerama.

Technical awards (Class 2): Reeves Soundcraft Corp.

Technical awards (Class 3): Westrex Corp.

Writing (motion-picture story): Ian McClellan Hunter, *Roman Holiday*.

Writing (screenplay): Daniel Taradash, *From Here to Eternity*.

Writing (story and screenplay): Charles Brackett, Walter Reisch, Richard Breen, *Titanic*.

## New York Film Critics' Awards

(1—best motion picture; 2—best male performance; 3—best feminine performance; 4—best direction; 5—best foreign film; 6—special award.)

1940 1. *The Grapes of Wrath*, 20th Cent.-Fox

2. Charles Chaplin, *The Great Dictator* (refused award)

3. Katharine Hepburn, *The Philadelphia Story*

4. John Ford, *The Grapes of Wrath*

5. *The Baker's Wife* (French)

1941 1. *Citizen Kane*, RKO-Mercury

2. Gary Cooper, *Sergeant York*

3. Joan Fontaine, *Suspicion*

4. John Ford, *How Green Was My Valley*

1942 1. *In Which We Serve*, UA-Noel Coward

2. James Cagney, *Yankee Doodle Dandy*

3. Agnes Moorehead, *The Magnificent Ambersons*

4. John Farrow, *Wake Island*

1943 1. *Watch on the Rhine*, Warner Bros.

2. Paul Lukas, *Watch on the Rhine*

3. Ida Lupino, *The Hard Way*

4. George Stevens, *The More the Merrier*

1944 1. *Going My Way*, Paramount

2. Barry Fitzgerald, *Going My Way*

3. Tallulah Bankhead, *Lifeboat*

4. Leo McCarey, *Going My Way*

1945 1. *The Lost Weekend*, Paramount

2. Ray Milland, *The Lost Weekend*

3. Ingrid Bergman, *Spellbound* and *The Bells of St. Mary's*

4. Billy Wilder, *The Lost Weekend*

5. (None)

6. *The True Glory* and *The Fighting Lady*

1946 1. *The Best Years of Our Lives*, Goldwyn-RKO Radio

2. Laurence Olivier, *Henry V*

3. Celia Johnson, *Brief Encounter*

4. William Wyler, *The Best Years of Our Lives*

5. *Open City* (Italian)

1947 1. *Gentleman's Agreement*, 20th Century-Fox

2. William Powell, *Life With Father*

3. Deborah Kerr, *The Adventuress* and *Black Narcissus*

4. Elia Kazan, *Gentleman's Agreement* and *Boomerang*

5. *To Live in Peace* (Italian)

1948 1. *Treasure of Sierra Madre*, Warner Bros.

2. Sir Laurence Olivier, *Hamlet*

3. Olivia de Havilland, *The Snake Pit*

4. John Huston, *Treasure of Sierra Madre*

5. *Paisan* (Italian)

1949 1. *All the King's Men*, Rossen-Columbia

2. Broderick Crawford, *All the King's Men*

- |      |   |      |   |
|------|---|------|---|
|      | 3. Olivia de Havilland, <i>The Heiress</i>        |      | 5. <i>Miracle in Milan</i> (Italian)  |
|      | 4. Carol Reed, <i>The Fallen Idol</i>             | 1952 | 1. <i>High Noon</i> , United Artists  |
|      | 5. <i>The Bicycle Thief</i> (Italian)             |      | 2. Ralph Richardson, <i>Breaking the Sound Barrier</i>                        |
| 1950 | 1. <i>All About Eve</i> , 20th Century-Fox        |      | 3. Shirley Booth, <i>Come Back, Little Sheba</i>                              |
|      | 2. Gregory Peck, <i>Twelve O'Clock High</i>       |      | 4. Fred Zinneman, <i>High Noon</i>  |
|      | 3. Bette Davis, <i>All About Eve</i>              |      | 5. <i>Forbidden Games</i> (French)  |
|      | 4. Joseph L. Mankiewicz, <i>All About Eve</i>     | 1953 | 1. <i>From Here to Eternity</i> , Columbia                                    |
|      | 5. <i>Ways of Love</i> (Franco-Italian)           |      | 2. Burt Lancaster, <i>From Here to Eternity</i>                               |
| 1951 | 1. <i>A Streetcar Named Desire</i> , Warner Bros. |      | 3. Audrey Hepburn, <i>Roman Holiday</i>                                       |
|      | 2. Arthur Kennedy, <i>Bright Victory</i>          |      | 4. Fred Zinnemann, <i>From Here to Eternity</i>                               |
|      | 3. Vivien Leigh, <i>A Streetcar Named Desire</i>  |      | 5. <i>Justice Is Done</i> (French)  |
|      | 4. Elia Kazan, <i>A Streetcar Named Desire</i>    |      | 6. <i>A Queen Is Crowned</i> (JARO) and <i>The Conquest of Everest</i> (JARO) |

### New York Drama Critics' Circle Awards

- |         |  |         |   |
|---------|--|---------|---|
| 1935-36 | <i>Winterset</i> , by Maxwell Anderson   |         | <i>The Madwoman of Chaillot</i> , by Jean Giraudoux-Maurice Valency <sup>1</sup>                                    |
| 1936-37 | <i>High Tor</i> , by Maxwell Anderson  |         | <i>South Pacific</i> , by Rodgers, Hammerstein, and Joshua Logan <sup>2</sup>                                       |
| 1937-38 | <i>Of Mice and Men</i> , by John Steinbeck                                     |         |   |
|         | <i>Shadow and Substance</i> , by Paul Vincent Carroll <sup>1</sup>             | 1949-50 | <i>The Member of the Wedding</i> , by Carson McCullers  |
| 1938-39 | (No award)   |         | <i>The Cocktail Party</i> , by T. S. Eliot <sup>1</sup>   |
|         | <i>The White Steed</i> , by Paul Vincent Carroll <sup>1</sup>                  |         | <i>The Consul</i> , by Gian-Carlo Menotti <sup>3</sup>  |
| 1939-40 | <i>The Time of Your Life</i> , by William Saroyan                              | 1950-51 | <i>Darkness at Noon</i> , by Sidney Kingsley <sup>3</sup>   |
| 1940-41 | <i>Watch on the Rhine</i> , by Lillian Hellman                                 |         | <i>The Lady's Not for Burning</i> , by Christopher Fry <sup>1</sup>   |
|         | <i>The Corn Is Green</i> , by Emlyn Williams <sup>1</sup>                      |         | <i>Guys and Dolls</i> , by Abe Burrows, Jo Swerling, and Frank Loesser <sup>2</sup>                                 |
| 1941-42 | (No award)   | 1951-52 | <i>I Am a Camera</i> , by John Van Druten <sup>4</sup>  |
|         | <i>Blithe Spirit</i> , by Noel Coward <sup>1</sup>                             |         | <i>Venus Observed</i> , by Christopher Fry <sup>1</sup>   |
| 1942-43 | <i>The Patriots</i> , by Sidney Kingsley                                       |         | <i>Pal Joey</i> , by Richard Rodgers, Lorenz Hart and John O'Hara <sup>2</sup>                                      |
| 1943-44 | (No award)   |         | <i>Don Juan in Hell</i> , by George Bernard Shaw <sup>5</sup>   |
|         | <i>Jacobowsky and the Colonel</i> , by Franz Werfel-S. N. Behrman <sup>1</sup> | 1952-53 | <i>Picnic</i> , by William Inge   |
| 1944-45 | <i>The Glass Menagerie</i> , by Tennessee Williams                             |         | <i>The Love of Four Colonels</i> , by Peter Ustinov <sup>1</sup>  |
| 1945-46 | (No award)   |         | <i>Wonderful Town</i> , by Jos. Fields, Jerome Chodorov, Betty Comden, Adolph Green, Leonard Bernstein <sup>2</sup> |
|         | <i>Carousel</i> , by Rodgers and Hammerstein <sup>2</sup>                      | 1953-54 | <i>The Teahouse of the August Moon</i> , by John Patrick  |
| 1946-47 | <i>All My Sons</i> , by Arthur Miller  |         | <i>On dine</i> , by Jean Giraudoux <sup>1</sup>   |
|         | <i>No Exit</i> , by Jean-Paul Sartre <sup>1</sup>                              |         | <i>The Golden Apple</i> , by John La-touche and Jerome Moross <sup>2</sup>  |
|         | <i>Brigadoon</i> , by Lerner and Loewe <sup>2</sup>                            |         |   |
| 1947-48 | <i>A Streetcar Named Desire</i> , by Tennessee Williams                        |         |   |
|         | <i>The Winslow Boy</i> , by Terence Rattigan <sup>1</sup>                      |         |   |
| 1948-49 | <i>Death of a Salesman</i> , by Arthur Miller                                  |         |   |

<sup>1</sup> Citation for best foreign play. <sup>2</sup> Citation for best musical. <sup>3</sup> Based on a novel by Arthur Koestler. <sup>4</sup> Based on Christopher Isherwood's *Berlin Stories*. <sup>5</sup> For "distinguished and original contribution to the theater."

### Awards by Music Critics' Circle of New York

- |         |   |         |  |
|---------|---|---------|--|
| 1941-42 | <i>Symphony No. 3</i> , by William Schuman      | 1945-46 | <i>Concerto for Cello and Orchestra</i> , by Samuel Barber |
| 1942-43 | <i>Symphony No. 1</i> , by Paul Creston         | 1946-47 | <i>Symphony No. 3</i> , by Aaron Copland                   |
| 1943-44 | <i>Jeremiah Symphony</i> , by Leonard Bernstein |         | <i>Quartet No. 2</i> , by Ernest Bloch <sup>1</sup>        |
| 1944-45 | <i>Symphony No. 2</i> , by Walter Piston        |         |  |

- 1947-48 *Symphony No. 3*, by Wallingford Riegger  
 1948-49 *Variation, Chaconne and Finale*, by Norman Dello Joio  
 1949-50 *Symphony No. 2*, by Roger Sessions  
*String Quartet (1949)*, by Leon Kirchner<sup>1</sup>  
 1951<sup>2</sup> *Short Symphony*, by Howard Swanson<sup>3</sup>  
*Comedy on the Bridge*, by Bohuslav Martinu<sup>4</sup>

- "*Spring*" *Symphony*, by Benjamin Britten<sup>5</sup>  
*Judith*, by William Schuman<sup>6</sup>  
 1952 *Piano Concerto*, by Alexei Haieff<sup>3</sup>  
*Stabat Mater*, by Francis Poulenc<sup>5</sup>  
*Septet*, by Paul Hindemith<sup>1</sup>  
 1953 *Concerto Grosso No. 2*, by Ernest Bloch<sup>3</sup>  
*Tom O'Bedlam*, by Jacob Avshalomoff<sup>5</sup>  
*Quartet No. 3*, by Ernest Bloch<sup>1</sup>

<sup>1</sup> Award for chamber music. <sup>2</sup> Covered the period from Oct. 1950 through 1951. In this voting, works by European composers were open to consideration for the first time. No chamber-music award was made. In addition to the awards shown, a special award was given jointly to NBC and to Gian-Carlo Menotti for the television opera *Amahl and the Night Visitors*. <sup>3</sup> Award for orchestral music. <sup>4</sup> Award for opera. <sup>5</sup> Award for choral music. <sup>6</sup> Award for music for the dance.

## The Hall of Fame

The Hall of Fame for Great Americans, established in 1900 on the campus of New York University, is an open-air colonnade with busts and tablets for 81 of the 83 persons so far honored for national achievements. New names are voted on every five years by a College of Electors of approximately 100 men and women from all the states. To be elected to the Hall of Fame, an individual must have been dead more than 25 years (before 1922, the stipulation was 10 years), must have been a citizen of the U. S., and must receive a majority vote. Nominations may be made by any citizen. The next election will be in 1955.

Names	Elected	Names	Elected
John Adams (statesman)	1900	James Kent (jurist)	1900
John Quincy Adams (statesman)	1905	Sidney Lanier (poet)	1945
Louis Agassiz (naturalist)	1915	Robert E. Lee (military officer)	1900
Susan B. Anthony (reformer)	1950	Abraham Lincoln (statesman)	1900
John James Audubon (naturalist)	1900	Henry W. Longfellow (poet)	1900
George Bancroft (historian)	1910	James Russell Lowell (poet)	1905
Henry Ward Beecher (clergyman)	1900	Mary Lyon (educator)	1905
Alexander Graham Bell (inventor)	1950	James Madison (statesman)	1905
Daniel Boone (explorer)	1915	Horace Mann (educator)	1900
Edwin Booth (actor)	1925	John Marshall (jurist)	1900
Phillips Brooks (clergyman)	1910	Matthew F. Maury (oceanographer)	1930
William Cullen Bryant (poet)	1910	Marla Mitchell (astronomer)	1905
William Ellery Channing (clergyman)	1900	James Monroe (statesman)	1930
Rufus Choate (lawyer)	1915	Samuel F. B. Morse (inventor)	1900
Henry Clay (statesman)	1900	William T. G. Morton (dentist)	1920
Samuel L. Clemens (author)	1920	John Lothrop Motley (historian)	1910
Grover Cleveland (statesman)	1935	Simon Newcomb (astronomer)	1935
James Fenimore Cooper (author)	1910	Thomas Paine (author)	1945
Peter Cooper (philanthropist)	1900	Alice Freeman Palmer (educator)	1920
Charlotte S. Cushman (actress)	1915	Francis Parkman (historian)	1915
James Buchanan Eads (engineer)	1920	George Peabody (philanthropist)	1900
Jonathan Edwards (clergyman)	1900	William Penn (colonizer)	1935
Ralph Waldo Emerson (author)	1900	Edgar Allan Poe (author)	1910
David G. Farragut (naval officer)	1900	Walter Reed (surgeon)	1945
Stephen C. Foster (song composer)	1940	Theodore Roosevelt (statesman)	1950
Benjamin Franklin (statesman)	1900	Augustus Saint-Gaudens (sculptor)	1920
Robert Fulton (inventor)	1900	William T. Sherman (army officer)	1905
Josiah Willard Gibbs* (physicist)	1950	Joseph Story (jurist)	1900
William Crawford Gorgas (physician)	1950	Harriet Beecher Stowe (author)	1910
Ulysses S. Grant (statesman)	1900	Gilbert Charles Stuart (painter)	1900
Asa Gray (botanist)	1900	Booker T. Washington (educator)	1945
Alexander Hamilton (statesman)	1915	George Washington (statesman)	1900
Nathaniel Hawthorne (author)	1900	Daniel Webster (statesman)	1900
Joseph Henry (physicist)	1915	J. A. McNeill Whistler (painter)	1930
Patrick Henry (statesman)	1920	Walt Whitman (poet)	1930
Oliver Wendell Holmes (author)	1910	Eli Whitney (inventor)	1900
Mark Hopkins (educator)	1915	John Greenleaf Whittier (poet)	1905
Elias Howe (inventor)	1915	Emma Willard (educator)	1905
Washington Irving (author)	1900	Frances Elizabeth Willard (reformer)	1910
Andrew Jackson (statesman)	1910	Roger Williams (clergyman)	1920
Thomas Jefferson (statesman)	1900	Woodrow Wilson* (statesman)	1950
John Paul Jones (naval officer)	1925		

\* Not yet represented by a bust and tablet.



# AVIATION



## Famous Firsts in Aviation

**T**HOUGH man succeeded in making powered flight only a half century ago, his dreams of flying go back to mythology.

The principle of jet propulsion, for example, was understood and put into design form some 2,000 years ago by Hero, an Alexandrian philosopher. And as far back as A.D. 1232 Genghis Khan's son, Ogdai, used rockets as a "secret weapon" in an attack on the Tartar city of Kaifeng. In 1480, Leonardo da Vinci drew sketches for what we now call helicopters.

Man's first aeronautical successes came in balloons.

**1782—First balloon flight.** Jacques and Joseph Montgolfier of Annonay, Fr., sent up a small smoke-filled balloon about mid-November.

**1783—First hydrogen-filled balloon flight.** Jacques A. C. Charles, Paris physicist, supervised construction by A. J. and M. N. Robert of a 13-ft. diameter balloon which was filled with hydrogen. It got up to about 3,000 ft. and traveled about 16 mi. in a 45-min. flight (Aug. 27).

**1783—First human balloon flights.** A Frenchman, Jean Pilâtre de Rozier, made the first captive balloon ascension (Oct. 15). With the Marquis d'Arlandes, Pilâtre de Rozier made the first free flight, reaching a peak altitude of about 500 ft., and traveling about 5½ mi. in 20 min. (Nov. 21).

**1784—First powered balloon.** Gen. Jean Baptiste Marie Meusnier developed the first propeller-driven and elliptically-shaped balloon—the crew cranking three propellers on a common shaft to give the craft a speed of about 3 mi. per hr.

**1784—First woman to fly.** Mme. Thible, a French opera singer (June 4).

**1793—First balloon flight in America.** Jean Pierre Blanchard, a French pilot, made it from Philadelphia to near Woodbury, Gloucester Co., N. J., in a little over 45 min. (Jan. 9).

**1794—First military use of the balloon.** Jean Marie Coutelle, using a balloon built for the French Army, made two 4 hr. observation ascents. The military value of the ascents seems to have been in damage to the enemy's morale.

**1797—First parachute jump.** André-Jacques Garnerin dropped from about 6,500 ft. over Monceau Park in Paris in a 23-ft. diameter chute made of white canvas with a basket attached (Oct. 22).

**1843—First air transport company.** In London, William S. Henson and John Stringfellow filed articles of incorporation for the Aerial Transit Company (Mar. 24). It failed.

**1852—First dirigible.** Henri Giffard, a French engineer, flew in a controllable (more or less) steam engine-powered balloon, 144 ft. long and 39 ft. in diameter, inflated with 88,000 cu. ft. of coal gas. It reached 6.7 mi. per hr. on a flight from Paris to Trappe (Sept. 24).

**1860—First aerial photographers.** Samuel Archer King and William Black made two photos of Boston, still in existence.

**1872—First gas-engine powered dirigible.** Paul Haenlein, a German engineer, flew in a semi-rigid frame dirigible, powered by a 4-cylinder internal combustion engine running on coal gas drawn from the supporting bag.

**1873—First transatlantic attempt.** *The New York Daily Graphic* sponsored the attempt with a 400,000 cu. ft. balloon carrying a lifeboat. A rip in the bag during inflation brought collapse of the balloon and the project.

**1897—First successful metal dirigible.** An all-metal dirigible, designed by David Schwarz, a Hungarian, took off from Berlin's Tempelhof Field and, powered by a 16-hp. Daimler engine, got several miles before leaking gas caused it to crash (Nov. 13).

**1900—First Zeppelin flight.** Germany's Count Ferdinand von Zeppelin flew the first of his long series of rigid-frame airships. It attained a speed of 18 mi. per hr. and got 3½ mi. before its steering gear failed (July 2).

**1903—First successful heavier-than-air machine flight.** Aviation was really born on the sand dunes at Kitty Hawk, N. C., when Orville Wright crawled to his prone position between the wings of the biplane he and his brother Wilbur had built, opened the throttle of their home-made 12-hp. engine and took to the air. He covered 120 ft. in 12 sec. Later that day, in one of four flights, Wilbur stayed up 59 sec. and covered 852 ft. (Dec. 17).

**1904—First airplane maneuvers.** Orville Wright made the first turn with an airplane (Sept. 15); 5 days later his brother Wilbur made the first complete circle.

**1905—First airplane flight over half an hour.** Orville Wright kept his craft up 33 min. 17 sec. (Oct. 4).

- 1906—First European airplane flight. Alberto Santos-Dumont, a Brazilian, flew a heavier-than-air machine at Bagatelle Field, Paris (Sept. 13).
- 1908—First airplane fatality. Lt. Thomas E. Selfridge, U. S. Army Signal Corps, was in a group of officers evaluating the Wright plane at Fort Myer, Va. He was up about 75 ft. with Orville Wright when the propeller hit a bracing wire and was broken, throwing the plane out of control, killing Selfridge and seriously injuring Wright (Sept. 17).
- 1910—First licensed woman pilot. Baroness Raymonde de la Roche of France, who learned to fly in 1909, received ticket No. 36 on March 8.
- 1910—First flight from shipboard. Eugene Ely took a Curtiss plane off from the deck of cruiser *Birmingham* at Hampton Roads, Va., and flew to Norfolk (Nov. 14). The following January he reversed the process, flying from Camp Selfridge to the deck of the battleship *Pennsylvania* in San Francisco Bay (Jan. 18).
- 1911—First U. S. woman pilot. Harriet Quimby, a magazine writer, who got ticket No. 37.
- 1913—First multi-engined aircraft. Built and flown by Igor Ivan Sikorsky while still in his native Russia.
- 1914—First aerial combat. In August, Allied and German pilots and observers started shooting at each other with pistols and rifles—with negligible results.
- 1915—First air raids on England. German Zeppelins started dropping bombs on four English communities (Jan. 19).
- 1918—First U. S. air squadron. The U. S. Army Air Corps made its first independent raids over enemy lines, in DH-4 planes (British-designed) powered with 400-hp. American-designed Liberty engines (Apr. 8).
- 1918—First regular airmail service. Operated for the Post Office Department by the Army, the first regular service was inaugurated with one round trip a day (except Sunday) between Washington, D. C., and New York City (May 15).
- 1919—First transatlantic flight. The NC-4, one of four Curtiss flying boats commanded by Lt. Comdr. Albert C. Read, reached Lisbon, Port. (May 27) after hops from Trepassy Bay, Nfd. to Horta, Azores (May 16-17), to Ponta Delgada (May 20). The Liberty-powered craft was piloted by Walter Hinton.
- 1919—First nonstop transatlantic flight. Capt. John Alcock and Lt. Arthur Whitten Brown, British World War I flyers, made the 1,900 mi. from St. John's, Nfd. to Clifden, Ire., in 16 hr. 12 min. in a Vickers-Vimy bomber with two 350-hp. Rolls-Royce engines (June 15-16).
- 1919—First lighter-than-air transatlantic flight. The British dirigible R-34, commanded by Maj. George H. Scott, left Firth of Forth, Scot. (July 2) and touched down at Mineola, L. I., 108 hr. later. The eastbound trip was made in 75 hr. (completed July 13).
- 1919—First scheduled passenger service (using airplanes). Aircraft Travel and Transport inaugurated London-Paris service (Aug. 25). Later the company started the first trans-channel mail service on the same route (Nov. 10).
- 1921—First naval vessel sunk by aircraft. Two battleships being scrapped by treaty were sunk by bombs dropped from Army planes in demonstration put on by Brig. Gen. William S. Mitchell (July 21).
- 1921—First helium balloon. The C-7, non-rigid Navy dirigible was first to use non-inflammable helium as lifting gas, making a flight from Hampton Roads, Va., to Washington, D. C. (Dec. 1).
- 1922—First member of Caterpillar Club. Lt. (later Maj. Gen.) Harold Harris bailed out of a crippled plane he was testing at McCook Field, Dayton, Ohio (Oct. 20), and became the first man to join the Caterpillar Club—those whose lives have been saved by parachute.
- 1923—First nonstop transcontinental flight. Lts. John A. Macready and Oakley Kelly flew a single-engine Fokker T-2 nonstop from New York to San Diego, a distance of just over 2,500 mi. in 26 hr. 50 min. (May 2-3).
- 1923—First autogyro flights. Juan de la Cierva, brilliant Spanish mathematician, made the first successful flight in a rotary wing aircraft in Madrid (June 9).
- 1924—First round-the-world flight. Four Douglas Cruiser biplanes of the U. S. Army Air Corps took off from Seattle under command of Maj. Frederick Martin (Apr. 6). 175 days later two of the planes (Lt. Lowell Smith's and Lt. Erik Nelson's) landed in Seattle after a circuitous route—one source saying 26,345 mi., another saying 27,553 mi.
- 1926—First polar flight. Then-Lt. Cmdr. Richard E. Byrd, acting as navigator, and Floyd Bennett as pilot, flew a trimotor Fokker from Kings Bay, Spitsbergen, over the North Pole and back in 15½-hr. flight (May 8-9).
- 1927—First solo transatlantic flight. Charles Augustus Lindbergh lifted his Wright-powered Ryan monoplane, *Spirit of St. Louis*, from Roosevelt Field, L. I., to stay aloft 33 hr. 39 min. and cover 3,600 mi. to Le Bourget Field outside Paris (May 20-21).
- 1927—First transatlantic passenger. Charles A. Levine was piloted by Clarence D. Chamberlin from Roosevelt Field, L. I., to Eisleben, Ger., in a Wright-powered Bellanca (June 4-5).



- 1928—First east-west transatlantic crossing. Baron Guenther von Huenefeld, piloted by German Capt. Hermann Koehl and Irish Capt. James Fitzmaurice, left Dublin for New York City (Apr. 12) in a single-engine all-metal Junkers monoplane. Some 37 hr. later they cracked up on Greenly Island, Labrador. Rescued.
- 1928—First U. S.-Australia flight. Sir Charles Kingsford-Smith and Capt. Charles T. P. Ulm, Australians, and two American navigators, Harry W. Lyon and James Warner, crossed the Pacific from Oakland to Brisbane. They went via Hawaii and the Fiji Islands in a trimotor Fokker (May 31-June 8).
- 1928—First trans-Arctic flight. Sir Hubert Wilkins, Australian explorer, piloted by Carl Ben Eielson, flew from Point Barrow, Alaska, to Spitsbergen (mid-April).
- 1929—First of the endurance records. With Air Corps Maj. Carl Spaatz in command and Capt. Ira Eaker as chief pilot, an Army Fokker, aided by refueling in the air, remained aloft 150 hr. 40 min. at Los Angeles (Jan. 1-7).
- 1929—First blind flight. James H. Doolittle proved the feasibility of instrument flying when he took off and landed entirely on instruments (Sept. 24).
- 1929—First rocket engine flight. Fritz von Opel, German auto maker, stayed aloft in his small rocket-powered craft for 75 sec., covering nearly 2 mi. (Sept. 30).
- 1929—First South Pole flight. Comdr. Richard E. Byrd, with Bernt Balchen as pilot, Harold G. Gatty, radio operator, and Capt. A. C. McKinley, photographer, flew a trimotor Fokker from the Bay of Whales, Little America, over the South Pole and back (Nov. 28-29).
- 1930—First Paris-New York nonstop flight. Dieudonné Coste and Maurice Bellonte, French pilots, flew a Hispano-powered Breguet biplane from Le Bourget Field to Valley Stream, L. I., in 37 hr. 18 min. (Sept. 2-3).
- 1931—First flight into the stratosphere. Prof. Auguste Piccard, Swiss physicist, and Charles Knipfer, ascended in a balloon from Augsburg, Ger., and reached a height of 51,793 ft. in a 17-hr. flight that terminated on a glacier near Innsbruck, Austria (May 27).
- 1931—First nonstop transpacific flight. Hugh Herndon and Clyde Pangborn took off from Sabishiro Beach, Japan, dropped their landing gear and flew 4,860 mi. to near Wenatchee, Wash., in 41 hr. 13 min. (Oct. 4-5).
- 1932—First woman's transatlantic solo. Amelia Earhart, flying a Pratt & Whitney Wasp-powered Lockheed Vega, flew alone from Harbor Grace, Nfld., to Ireland in approximately 15 hr. (May 20-21).
- 1932—First westbound transatlantic solo. James A. Mollison, British pilot, took a de Havilland Puss Moth from Portmarnock, Ire., to Pennfield, N. B. (Aug. 18).
- 1932—First woman airline pilot. Ruth Rowland Nichols, first woman to hold three international records at the same time—speed, distance, altitude—was employed by N. Y.-New England Airways.
- 1933—First round-the-world solo. Wiley Post took a Lockheed Vega, *Winnie Mae*, 15,596 mi. around the world in 7 days 18 hr. 49½ min. (July 15-22).
- 1937—First successful helicopter. Hanna Reitsch, German woman pilot, flew Dr. Heinrich Focke's FW-61 in free, fully-controlled flight at Bremen (July 4).
- 1939—First turbojet flight. Just before their invasion of Poland, the Germans flew a Heinkel He-178 plane powered by a Heinkel S3B turbojet (Aug. 27).
- 1942—First American jet plane flight. Robert Stanley, chief pilot for Bell Aircraft Corp., flew the Bell XP-59 *Atracomel* at Muroc Army Base, Calif. (Oct. 1).
- 1947—First piloted supersonic flight in an airplane. Capt. Charles E. Yeager, U. S. Air Force, flew the X-1, rocket-powered research plane built by Bell Aircraft Corp., faster than the speed of sound at Muroc Air Force Base, Calif. (Oct. 14).
- 1949—First round-the-world nonstop flight. Capt. James Gallagher and USAF crew of 13 flew a Boeing B-50A Superfortress around the world nonstop from Ft. Worth, Tex., returning to same point; 23,452 mi. in 94 hr. 1 min., with 4 aerial refuelings enroute (Feb. 27-Mar. 2).
- 1950—First nonstop transatlantic jet flight. Col. David C. Schilling (USAF) flew 3,300 mi. from England to Limestone, Maine, in 10 hr. 1 min. (Sept. 22).
- 1950—First jet-plane battle. Four U. N. jets attacked by 8 to 12 Communist jets near Sinuiju, Korea. One enemy jet reported shot down and another damaged; no U. N. losses (Nov. 8).
- 1951—First solo across North Pole. Charles F. Blair, Jr., flew a converted P-51 (May 29).
- 1952—First jetliner service. De Havilland Comet flight inaugurated by BOAC between London and Rome (Apr. 21). Round trip: 4 hr. 46 min. flying time.
- 1952—First launching of fighter plane from bomber. Jet fighter plane was launched from inside B-26 bomber (announced by Air Force Apr. 22).
- 1952—First transatlantic helicopter flight. Capt. Vincent H. McGovern and 1st Lt. Harold W. Moore piloted 2 Sikorsky H-19s from Westover, Mass., to Prestwick, Scot. (3,410 mi.). Trip was made in 5 steps, with flying time of 42 hr. 25 min. (July 15-31).
- 1952—First transatlantic round trip in same day. British Canberra twin-jet bomber flew from Aldergrove, N. Ire., to Gander, Nfld., and back in 7 hr. 59 min. flying time (Aug. 26).



## International Airplane Records

Source: National Aeronautic Association.

(over 3-kilometer—1.864 mi. course)

Speed (mph)	Date	Type plane	Pilot	Place
266.58	Nov. 4, '23	Curtiss	Lt. Williams (U.S.A.)	Mineola
278.48	Dec. 11, '24	Ferbois	Adj. Bonnet (France)	Istres
294.38	Sept. 5, '32	.....	Maj. J. H. Doolittle (U.S.A.)	Cleveland
304.98	Sept. 4, '33	Wedell-Williams	James R. Wedell (U.S.A.)	Glenview, Ill.
314.32	Dec. 25, '34	Caudron	Raymond Delmotte (France)	Istres
352.39	Sept. 13, '35	Hughes Special	Howard Hughes (U.S.A.)	Santa Anna
379.63	Nov. 11, '37	BF-113R	Herman Wurster (Germany)	Augsburg
469.22	Apr. 26, '39	ME-109R	Fritz Wendel (Germany)	Augsburg
606.25	Nov. 7, '45	Gloster Meteor IV	Gp. Capt. H. Wilson (Gr. Britain)	Herne Bay
615.78	Sept. 7, '46	Gloster Meteor	Gp. Capt. E. M. Donalson (Gr. Britain)	Little Hampton
650.80	Aug. 25, '47	Douglas D-558	Maj. Marion Carl, USMC (U.S.A.)	Muroc AF, Calif.
670.98	Sept. 15, '48	North American F-86A	Maj. R. L. Johnson (USAF)	Muroc AF, Calif.
698.51	Nov. 19, '52	North American F-86D	Capt. James S. Nash (USAF)	Salton Sea, Calif.
755.15	Oct. 29, '53	.....	Lt. Col. F. K. Everest, Jr. (USAF)	Salton Sea, Calif.

(Fastest U. S. subcontinental—Col. W. W. Millikan, North American F-86F-25 from Los Angeles International Airport to Floyd Bennett Field, N. Y.—2,445.9 mi., in 4 hrs. 6 min., 16 sec., average speed 595.9 mph.—Jan. 2, 1954.)

### Distance

Distance (mi.)	Date	Crew	From	To
3,352.91	Oct. 28-29, '26	Lt. Costes & Capt. Rignot (France)	Le Bourget	Jask
3,910.90	June 4-6, '27	Clarence D. Chamberlin, C. A. Levine (U.S.A.)	New York	Eisleben, Germany
4,466.57	July 3-5, '28	Majs. A. Ferrarin, Del Prete (Italy)	Rome	Touros
4,911.93	Sept. 27-29, '29	Costes & Bellonte (France)	Le Bourget	Moulant
5,011.35	July 28-30, '31	Russel N. Boardman, John Polando (U.S.A.)	New York	Istanbul
5,656.93	Aug. 5-7, '33	Maurice Rossi, Paul Codos (France)	New York	Ryack
6,305.66	July 12-14, '37	Sqd. Ldr. M. Gromov, Youmachov, Daniline (U.S.S.R.)	Moscow	San Jacinto, Calif.
7,158.44	Nov. 5-7, '38	Sqd. Ldr. R. Kellett (Gr. Britain)	Ismalia (Suez)	Darwin
7,916.00	Nov. 19-20, '45	Col. C. S. Irvine, pilot, Lt. Col. G. R. Stanley, copilot (U.S.A.)	Guam	Washington, D. C.
11,235.60	Sept. 29-Oct. 1, '46	Comdr. Thomas D. Davies, Comdrs. Eugene P. Ranklin, Walter S. Reid, Lt. Comdr. Ray A. Tabeling (U.S.A.)	Perth, Australia	Columbus, Ohio

(Longest light airplane distance and longest solo, international—William P. Odom, U. S. Beech Bonanza (185 hp.) from Honolulu, Hawaii to Teterboro, N. J., 4,957.24 mi., March 8-9, 1949.)

### Distance (Closed Course)

Distance (mi.)	Date	Crew	Place
2,895.970	Aug. 3-5, '27	Edzard & Ristics (Germany)	Dessau
4,763.800	June 1-2, '28	Capt. Ferrarin & Del Prete (Italy)	Casal e del Paati
4,988.969	Dec. 15-17 '30	Costos & Codos (France)	Istres
5,088.267	May 31—June 2, '30	Maj. U. Maddalena & Lt. F. Cecconi (Italy)	Montecelio
6,444.881	June 7-10, '31	J. LeBrix & M. Doret (France)	Istres
6,587.441	Mar. 23-26, '32	Bossoutrot & Rossi (France)	Oran
7,239.588	May 13-15, '38	Comm. Fujita & Sgt. Maj. Takahashi (Japan)	Kisarazu
8,037.899	July 30—Aug. 1, '39	Angelo Tondi, Roberto Dagasso, Ferruccio Vignoli (Italy)	Rome
8,854.308	Aug. 1-2, '47	Lt. Col. O. F. Lassiter (U.S.) Capt. W. J. Valentine (U.S.)	Tampa, Fla.

### Altitude

Height (feet)	Date	Crew	Place
38,419	July 25, '27	Lt. C. C. Champion (U.S.A.)	Washington
41,795	May 26, '29	Willi Neuenhofen (Germany)	Dessau
43,166	June 4, '30	Lt. Apollo Soucek (U.S.A.)	Washington
43,976	Sept. 16, '32	Capt. Cyril F. Uwings (Gr. Britain)	Filton, Bristol
44,819	Sept. 28, '33	G. Lemoine (France)	Villacoublay
47,352	April 11, '34	Com. Renato Donati (Italy)	Rome
49,994	Sept. 28, '36	Sqd. Ldr. S. R. D. Swain (Gr. Britain)	South Farnborough
53,937	June 30, '37	Fl. Lt. M. J. Adam (Britain)	Farnborough
56,046	Oct. 22, '38	Col. Mario Pezzi (Italy)	Montecelio
59,445*	Mar. 23, '48	John Cunningham (Gr. Britain)	Hatfield
63,668*	May 4, '53	Walter F. Gibb (Gr. Britain)	Bristol

\* Jet-propelled aircraft.

Absolute Altitude—72,394.795 ft. Cpts. Orvil Anderson & Albert Stevens, U. S., Nov. 11, 1935 from Rapid City, S. D., in balloon. U. S. Airplane Record—47,910 ft. Maj. F. F. Ross, pilot, Lt. D. M. Davis, copilot, Lts. L. B. Barrier, C. B. Webster, F/O P. Morrisett, Sgt. W. S. George, Harmon Field, Guam, May 15, 1946, Boeing B-29.

## Helicopter Records

Source: National Aeronautic Association.

### DISTANCE, AIRLINE

International & U. S.: 1,217.14 mi.  
Elton J. Smith (U. S.) in Bell 47-D1  
helicopter powered by 200-hp. Franklin;  
from Ft. Worth, Tex., to Niagara  
Falls, N. Y., Sept. 17, 1952.

### DISTANCE, CLOSED CIRCUIT

International & U. S.: 621.369 mi.  
Majs. D. H. Jensen & W. C. Dodds (U. S.)  
in Sikorsky R-5A powered by 450-hp.  
Pratt & Whitney; Dayton, Ohio, Nov.  
14, 1946.

### ALTITUDE

International and U. S.: 22,110 ft.  
Capt. Russell M. Dobyns (USAF) in  
Piasecki YH-21 powered by 1,425-hp.  
Wright; Dayton, Ohio, Sept. 2, 1953.

### MAXIMUM SPEED

International and U. S.: 146.763 mph.  
Capt. Russell M. Dobyns (USAF) in  
Piasecki YH-21 powered by 1,425-hp.  
Wright; Vandalla, Ohio, Sept. 4, 1953.

### SPEED FOR 100 K.M. (CLOSED COURSE)

International & U. S.: 122.749 mph.  
Harold E. Thompson (U. S.) in Sikorsky  
S-52-1 powered by 245-hp. Franklin;  
Milford, Conn., May 6, 1949.

### SPEED FOR 1,000 KILOMETERS IN A CLOSED CIRCUIT (621 MILES)

International & U. S.: 66.642 mph.  
Majs. D. H. Jensen & W. C. Dodds (U. S.)  
in Sikorsky R-5A powered by 450-hp.  
Pratt & Whitney; Dayton, Ohio, Nov.  
14, 1946.

### Certificated U. S. Airplane Pilots

Source: Civil Aeronautics Administration.

Year	Total	Airline transport	Com- mercial	Private
1938.....	22,983	1,159	7,839	13,985
1939.....	33,706	1,197	11,677	20,832
1940.....	69,829	1,431	18,791	49,607
1941.....	129,947	1,587	34,578	93,782
1942.....	166,626	2,177	55,760	108,689
1943.....	173,206	2,315	63,940	106,951
1944.....	183,383	3,046	68,449	111,888
1945.....	296,895	5,815	162,873	128,207
1946.....	400,061	7,654	203,251	189,156
1947.....	433,241 <sup>1</sup>	7,059 <sup>1</sup>	181,912 <sup>1</sup>	244,270 <sup>1</sup>
1948.....	491,306 <sup>2</sup>	7,762 <sup>2</sup>	176,845 <sup>2</sup>	306,699 <sup>2</sup>
1949.....	525,174	9,025	187,769	328,380
1951 <sup>3</sup> .....	580,574	10,813	197,000	371,861
1952 <sup>4</sup> .....	573,597	10,898	191,523	371,176
1953 <sup>5</sup> .....	647,865	12,316	193,964	376,849

<sup>1</sup> As of April 1, 1948. <sup>2</sup> As of May 1, 1949. <sup>3</sup> Total active and inactive as of Dec. 31, 1951. <sup>4</sup> Total active and inactive as of July 1, 1952. <sup>5</sup> Total active and inactive as of July 1, 1953. NOTE: No figures available for 1950.

## U. S. Scheduled Airlines, 1953

Source: Civil Aeronautics Board.

Airline	Certificated route mileage <sup>1</sup>	Revenue passenger miles, 1953 <sup>2</sup>
<b>Domestic (Trunk)</b>		
American.....	19,981	3,210,483,000
Braniff.....	10,992	463,025,000
Capital.....	7,370	695,003,000
Colonial.....	1,433	91,324,000
Continental.....	4,469	147,508,000
Delta <sup>3</sup> .....	13,309	693,945,000
Eastern.....	18,291	2,309,267,000
National.....	2,715	572,369,000
Northeast.....	3,058	91,398,000
Northwest.....	10,594	719,509,000
Trans World (TWA).....	15,661	2,370,019,000
United.....	16,090 <sup>4</sup>	2,245,429,000
Western.....	5,526	359,115,000
Total.....	129,488	14,297,581,000
<b>Local Service</b>		
Allegheny.....	2,637	31,235,000
Bonanza.....	1,333	15,245,000
Braniff.....	1,682	10,689,000
Central.....	1,499	6,315,000
Frontier.....	4,397	32,389,000
Helicopter (Chicago).....	313	.....
Helicopter (Los Angeles).....	435	.....
Helicopter (New York).....	458	26,000
Lake Central.....	1,499	8,347,000
Mohawk.....	1,250	27,116,000
North Central.....	3,135	37,626,000
Ozark.....	2,632	20,343,000
Piedmont.....	2,992	56,769,000
Pioneer.....	2,027	40,750,000
Southern.....	1,912	19,287,000
Southwest.....	1,272	34,752,000
Trans-Texas.....	3,423	20,934,000
West Coast.....	2,070	28,880,000
Wiggins, E. W. <sup>5</sup> .....	.....	177,000
Total.....	34,966	390,880,000
<b>Foreign or Overseas</b>		
American.....	1,538	79,488,000
Braniff.....	7,870	76,670,000
Caribbean.....	460	9,746,000
Colonial.....	2,030	40,197,000
Delta <sup>3</sup> .....	3,270	42,575,000
Eastern.....	3,570	189,688,000
Hawaiian.....	379	52,059,000
Mackey.....	230	3,602,000
Midget.....	164	( <sup>6</sup> )
National.....	114	45,636,000
Northwest.....	15,139	131,664,000
Pan American.....	149,283	1,980,378,000
Panagra.....	10,421	136,038,000
Resort Airlines.....	( <sup>7</sup> )	6,077,000
Trans-Pacific.....	379	19,789,000
Trans-World.....	29,728	509,998,000
United.....	2,898	139,046,000
UMCA.....	378	837,000
Western.....	1,640	( <sup>8</sup> )
Total.....	229,491	3,463,488,000

<sup>1</sup> As of Dec. 31, 1953. <sup>2</sup> Calendar year. <sup>3</sup> Chicago and Southern merged with Delta May 1, 1953. Passenger-mile data includes C & S for Jan. 1-Apr. 30, 1953.

<sup>4</sup> Includes Catalina Air Transport, 47 miles. <sup>5</sup> Renewal denied; service terminated Aug. 1, 1953. Passenger-miles shown are Jan. 1-July 31, 1953. <sup>6</sup> Operations not started.

<sup>7</sup> Certified route mileage not compiled. Cruise carrier. <sup>8</sup> Route to Mexico not operating.

## Important American Aircraft Types

Manufacturer <sup>1</sup>	Name or model no.	Seats	No. and make engine	Engine hp.	High speed	Cruising speed	Gross weight	Span ft. in.	Length ft. in.
<b>Executive, Transport</b>									
Aero Des. & Eng. Co.	520	5	2 Lyc GO-435-C2	260	...	...	5,500	43 10	34 0
Beech A. Corp.	50 (Twin Bonanza)	6	2 Lycoming	260	...	...	5,500	45 3	31 6
	D-18S	4-10	2 P & W R-985	450	256	205	8,500	47 7	33 11½
Boeing Airplane Co.	Stratocruiser	57-92	4 P & W R-4360	3,500	351	312	142,500	141 3	110 4
Consolidated Vultee A. Corp.	240	36-42	2 P & W R-2800	2,100	320	285	42,500	91 9	74 8
	340	46	2 P & W CB16	2,400	...	...	47,000	...	...
Douglas A. C.	DC-3	30	2 P & W S1C3G	1,050	257	211	25,200	95 0	64 5½
	DC-4	48-58	4 P & W R-2000	1,450	300	250	73,000	117 6	93 5
	DC-6	48-66	4 P & W R-2800	2,400	360	311	97,200	117 6	100 7
	DC-6B	47-88	4 P & W R-2800	2,400	...	...	107,000	...	...
	DC-7	70-99	4 Wright 972	3,250	...	...	122,200	117 6	108 11
Lockheed A. Corp.	Constellation	34-64	4 Wright R-3350	2,500	354	300	107,000	123 0	95 3
	1049	91	4 Wr 975 C18CB-1	2,800	...	...	120,000	...	...
	1049C	99	4 Wright 972	3,250	...	...	133,000	123	113 6
G. L. Martin Co.	202	42	2 P & W R-2800	2,400	312	286	42,750	93 3¾	71 4
	404	52	2 P & W CB16	2,400	...	...	44,900	...	...
<b>Personal</b>									
Aeronca A. Corp.	Sedan	4	1 Continental	145	129	114	2,050	37 6	25 3
	Champion	2	1 Continental	90	110	100	1,300	35 2	21 6
Beech A. Corp.	Bonanza	4	1 Continental	185	184	170	2,650	32 10	25 2
Cessna A. C.	140	2	1 Continental	90	125+	105+	1,500	33 4	21 6
	170	4	1 Continental	145	140+	120+	2,200	36 0	25 0
	180	4	1 Continental	225	...	...	2,550	36 0	25 0
	195	5	1 Jacobs	300	...	...	3,350	...	...
Engrg. & Research Corp.	Ecoupe	2	1 Continental	85	120	110	1,400	30 0	20 9
Helio A. Corp.	H-391	4	1 Lycoming	260	...	...	2,800	35	27 3
Piper A. Corp.	Cub PA-11	2	1 Continental	90	112	100	1,220	35 3	22 4
	Clipper	4	1 Continental	115	125	112	1,650	29 3	20 1
	Piper-Stinson	4	1 Franklin	165	133	130	2,400	34 0	25 2
	Super Cub	2	1 Continental	90	...	...	1,500	...	...
	Pacer	4	1 Lycoming	125	...	...	1,800	...	...
	Tri-Pacer	4	1 Lycoming	125	...	...	1,800	...	...
	Apache PA-23	4	2 Lycoming	150	...	...	3,500	37	27 3
Ryan Aero. Co.	Navion	4	1 Continental	205	163	155	2,750	33 4½	27 3
Taylorcraft	Traveler	2	1 Continental	65	...	...	1,200	...	...
	Sportsman	2	1 Continental	85	...	...	1,280	...	...
Texas Engrg. Mfg. Co.	Swift 125	2	1 Continental	125	150	140	1,710	29 2	20 11
	Silvaire 8F	2	1 Continental	90	128	115	1,400	35 0	20 0
	Silvaire Sedan	4	1 Continental	165	140+	130	2,280	38 0	23 6
<b>Helicopters</b>									
Bell A. Corp.	47-D	2	1 Franklin	178	92	85	2,200	35 2	41 2
	47-G	3	1 Franklin	200	...	...	2,350	...	...
Hiller A. Corp.	UH-12	3	1 Franklin	178	84	...	2,247	...	...
	UH-12B	3	1 Franklin	200	...	...	...	...	...
Kaman A. Corp.	K-240	2	1 Lycoming	250	...	...	3,000	...	...
McCulloch Motors Corp.	MC-4C	2	1 Franklin	200	...	...	2,300	23 0	32 5
Sikorsky A. Div.	S-51	4	1 P & W R-984	450	103	85	5,500	49 0	57 1
	S-52	2	1 Franklin	165	...	...	2,100	...	...
	S-55	9-12	1 P & W S1H2	600	...	...	6,835	...	...

<sup>1</sup> A. C.—Aircraft Company; A. Corp.—Aircraft Corporation; A. Div.—Aircraft Division.

## America's Warplane Production Record, 1940-45

Type	1940	1941	1942	1943	1944	1945	1940-45
Total	6,019	19,433	47,836	85,898	96,318	47,714	303,218
Bombers	1,191	4,115	12,627	29,355	35,003	16,492	98,783
Fighters	1,685	4,416	10,769	23,983	38,873	21,696	101,427
Photographic and reconnaissance	121	727	1,468	734	259	531	3,840
Transport	290	532	1,984	7,012	9,834	4,629	24,281
Trainer	2,731	9,373	17,631	19,939	7,577	1,309	58,560
Other*	1	270	3,357	4,870	4,772	3,057	16,327

\* Includes special purpose, rotary wing, and liaison aircraft. Source: Civil Aeronautics Administration.



# Important American Aircraft Types (U. S. Air Force)

Source: U. S. Department of Defense.

Type	Manufacturer	Power plant <sup>1</sup>	Maximum take-off ratings	Span ft. in.	Length ft. in.	Height ft. in.	Weight	Speed	Crew
<b>BOMBERS</b>									
B-26A thru F	Douglas	2 R-2800 P&WA	2,000 hp.	70 0	50 8	18 5	40,000	370 top	3
B-29 & B-29A	Boeing	4 R-3350-79 <sup>2</sup>	2,200 hp.	141 3	99 0	27 9	140,000	400 top	11
B-36D thru J	Convair	6 R-4360-53 P&WA	3,500 hp.	230 0	162 1	46 8	358,000	Over 435	16
XB-47, B-47A	Boeing	6 J-47-GE-11	5,200 lb.	116 0	106 8	27 11	185,000	600 class	3
B-50A & D	Boeing	4 R-4360-35, 35B P&WA	3,500 hp.	141 3	99 0	32 8	170,000	Over 400	11
B-52A	Boeing	8 J-57-P-3 P&WA	10,000	185 0	153 0	48 0	300,000	.....	..
B-57A	Martin	2 J-65-W-1	7,200 lb.	65 0	64 0	16 0	.....	.....	3
B-66	Douglas	2 Jet	.....	.....	.....	.....	.....	600-700	3
<b>FIGHTERS</b>									
F-51 D-H	North American	1 V-1650-9 Pck	1,335 hp.	37 0	33 3	13 7	12,000	470 appx.	1
F-80A,B,C,	Lockheed	1 J-33-23 or -35 AL	5,200 lb.	38 9	34 5	11 3	16,000	600 class	1
F-84B thru E,G	Republic	1 Single jet	.....	36 4	37 2	12 8	17,000	600 class	1
F-84F	Republic	1 J-65 Wr	7,200 lb.	33 7	43 3	14 4	25,000	Over 600	1
F-86A & E,F	North American	1 J-47-GE-13	5,200 lb.	37 1	37 5	14 7	16,000	650 class	1
F-86D	North American	1 J-47-GE-17	5,200 lb.	37 1	41 8	15 0	18,000	650 class	1
F-89A thru E	Northrop	2 J-35-A-21	5,000 lb.	56 2	53 4	17 7	40,000	600 class	2
F-94A,B	Lockheed	1 J-33-A-33	5,200 lb.	38 9	40 1	12 7	16,000	600 class	2
F-94C	Lockheed	1 P&WA J48-P-5	6,250 lb.	37 6	41 5	13 7	20,000	600 class	2
F-100A	North American	1 P&WA J57-P-7	.....	.....	.....	.....	.....	supersonic	..
F-101A	McDonnell	2 P&WA J57-P-13	.....	.....	.....	.....	.....	.....	..
F-102A	Convair	1 P&WA J57-P-11	.....	.....	.....	.....	.....	supersonic	..
<b>TRANSPORTS</b>									
C-45A-F	Beech	2 R-985-AN-1 or -3 P&WA	450 hp.	47 6	34 2	9 3	8,800	225 top	2
C-46F	Curtiss	2 R-2800-75 P&WA	2,000 hp.	108 0	76 3	21 7	55,000	250	4
C-47D	Douglas	2 R-1830-90D P&WA	1,200 hp.	95 0	63 8	16 9	33,000	200	5
C-54G	Douglas	4 R-2000-9 P&WA	1,450 hp.	117 6	93 5	27 6	82,500	300 top	3
C-74	Douglas	4 R-4360-49 P&WA	3,250 hp.	173 3	124 2	43 9	165,000	Over 300	5
C-82	Fairchild	R-2800-85 P&WA	2,100 hp.	106 5	77 1	26 3	54,000	250 top	5
C-97A-C,G	Boeing	4 R-4360-59B P&WA	3,250 hp.	141 3	110 4	38 3	153,000	Over 350	5
C-119B & C	Fairchild	2 R-4360-20W P&WA	3,250 hp.	109 4	86 6	26 8	74,000	Over 250	5
C-121A,B	Lockheed	4 R-3350-75	2,500 hp.	123 0	95 4	23 0	135,000	Over 350	5
C-123B	Fairchild	2 R-2800-99W	2,500 hp.	110 0	75 9	34 1	54,000	245	2
C-124A,C	Douglas	4 R-4360-20W P&WA	3,250 hp.	173 4	127 1	48 4	210,000	Over 300	..
C-118A	Douglas	4 R-2800-52W P&WA	2,100 hp.	117 6	106 10	28 8	103,000	360	5
YC-124B	Douglas	4 T34-P-1 P&WA	.....	.....	.....	.....	.....	.....	..
		Turboprop	5,500 hp.	.....	.....	.....	200,000	.....	..
XC-130	Lockheed	4 Turboprop AL	.....	.....	.....	.....	.....	.....	..
C-131A,B	Convair	2 R-2800-99W P&WA	2,500 hp.	91 9	74 8	27 3	.....	.....	..
<b>HELICOPTERS</b>									
H-5G,H	Sikorsky	1 R-985-AN-5 P&WA	450 hp.	49 0	41 1	13 0	6,500	105	1
YH-12B	Bell	1 R 1340-55 P&WA	600 hp.	49 0	41 1	13 0	6,500	105	1
H-13B,C,D	Bell	1 O-335-3	178 hp.	35 2	41 2	9 1	2,500	100	1
XH-15	Bell	1 XO-470-5	285 hp.	37 4	44 9	11 0	2,800	Over 100	1
XH-16	Piasecki	2-R 2180-11 P&WA	1,650 hp.	82 0	113 0	31 1	.....	.....	..
YH-18A	Sikorsky	1-O-425-1	245 hp.	33 0	27 6	9 10	3,000	Over 100	2
H-19A	Sikorsky	1 R 1340-57 P&WA	600 hp.	53 0	41 0	14 0	8,000	Over 120	2
H-21A	Piasecki	1 R-1820-103 Wr	1,425 hp.	44 0	54 5	15 0	14,000	Over 140	2
H-23A	Hiller	1 O-335-4	178 hp.	35 0	38 6	9 5	2,400	84	1
XH-26	American	AJ-7.5	.....	25 10	25 9	7 6	700	80	..

<sup>1</sup> AL—Allison; Con—Continental; GE—General Electric; Lyc—Lycoming; Pck—Packard; P&WA—Pratt and Whitney Aircraft; WE—Western Electric; Wr—Wright.

## Peacetime Production Record

Year	Military	Personal	Transport	Total	Year	Military	Personal	Transport	Total
1946.....	1,669 <sup>2</sup>	34,568 <sup>1</sup>	433 <sup>1</sup>	36,670	1950.....	( <sup>3</sup> )	3,391 <sup>1</sup>	129 <sup>1</sup>	( <sup>3</sup> )
1947.....	2,100 <sup>2</sup>	15,399 <sup>1</sup>	278 <sup>1</sup>	17,717	1951.....	( <sup>3</sup> )	2,279 <sup>1</sup>	198 <sup>1</sup>	( <sup>3</sup> )
1948.....	( <sup>3</sup> )	7,039 <sup>1</sup>	263 <sup>1</sup>	( <sup>3</sup> )	1952.....	( <sup>3</sup> )	3,057 <sup>1</sup>	452 <sup>1</sup>	( <sup>3</sup> )
1949.....	( <sup>3</sup> )	3,379 <sup>1</sup>	166 <sup>1</sup>	( <sup>3</sup> )	1953.....	( <sup>3</sup> )	3,825 <sup>1</sup>	309 <sup>1</sup>	( <sup>3</sup> )

<sup>1</sup> Source: Census Bureau. <sup>2</sup> Source: Statistical Control Div. of Air Comptroller, Air Force. <sup>3</sup> Not for publication.

# ASTRONOMY AND CALENDAR

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## Kinds of Time

Of the three main kinds of time (sidereal, apparent solar, and mean solar), the two kinds used in our calendar pages (local civil and standard time) are both types of mean solar time.

*Sidereal time* is used mostly in astronomy. It is nearly but not exactly star-time, and is measured by the diurnal rotation of the vernal equinox point in the sky. Sidereal days are shorter than solar days by about  $3^m 56^s$  of mean time.

*Apparent solar time* is measured by the apparent diurnal rotation of the sun, and is the hour-angle of the sun  $+12^h$ . When the sun is at lower transit we have  $0^h$  by apparent time; when it is on the upper meridian the apparent time is  $12^h$ . The sun is not a good timekeeper, its eastward motion along the ecliptic being irregular, so apparent days are of unequal duration.

*Mean solar time* is the hour-angle of the "mean sun"  $+12^h$ . The mean sun is an imaginary body moving uniformly along the celestial equator. When the mean sun is on the lower meridian, the mean time is  $0^h$ . The actual sun is sometimes ahead of and sometimes behind the mean sun, and the difference at any moment is the *equation of time*. When the sun is west of the mean sun, we have the "sun fast" situation, and the sun crosses the meridian before the mean sun; when the sun is east of the mean sun, we have the "sun slow" condition, and the sun transits after the mean sun. The equation of time helps in conversion of apparent and mean solar time. No clock runs on apparent time but ordinary clocks keep mean solar time in some form.

*Local civil time* (L.C.T.) is the mean solar time of a designated meridian, and its day begins with the mean sun at lower transit. This is midnight, the moment of *zero hour* ( $0^h$ ). Ordinary clocks are not set to local civil time, because this time—

at any instant—varies with any change of longitude.

*Standard time* is the local civil time of a standard meridian, but used over an entire time-zone. In the U. S. the four zones (Eastern, Central, Mountain, and Pacific) are based upon the standard meridians of  $75^\circ$ ,  $90^\circ$ ,  $105^\circ$ , and  $120^\circ$  respectively. Ordinary clocks run on standard time, a type of mean solar time. In the summer, in certain localities, they run on advanced time (as daylight saving time) but this is only a clock-setting, and is actually standard time. Daylight saving time for a certain zone is the normal standard time of one zone to the east. While popular in certain metropolitan areas, it is not used for scientific observations. Advanced time is  $1^h$  later on the clock-face than the normal standard time of the same zone.

*Time zones.* A time-zone chart of the entire world shows clearly how the world is divided into 24 time zones according to longitude. In a large proportion of countries, standard time is in use, and commonly the time on the clock-face reads 1 hour later for each zone east of a given zone, and 1 hour earlier for each zone west of a given zone. The zero time-zone of the world runs thru Greenwich, Eng., and the zones are so marked that the standard time at a particular station, added algebraically to the zone-number at the bottom gives the corresponding universal time or Greenwich civil time. For example, 3 A.M., M.S.T.  $+ 7^h = 10^h$  U.T. or G.C.T.

Mexico, except for the northern part of Lower California, uses 90th-meridian time entirely. Canada uses the 4 standard-time zones of the U. S., and two others: (1) 60th-meridian or Atlantic standard time, for New Brunswick, Nova Scotia, and Quebec (east of  $68^\circ$  w.),  $4^h$  earlier than Greenwich, and (2) 135th-meridian or Yukon standard time,  $9^h$  earlier than Greenwich.

Newfoundland and the Labrador coast use Newfoundland standard time, 3<sup>h</sup> 30<sup>m</sup> earlier than Greenwich. Alaska uses 4 time-zones, those based on the following meridians of west longitude: 120° (Juneau), 135° or Yukon standard time (Yakutat), 150° or Alaska standard time (Fairbanks), and 165° (Nome).

*The Date-line.* At any moment of time, usually there are parts of two different but contiguous days going on at different places on the earth. The change of date is made at the date-line, an imaginary line that follows essentially the course of the 180° meridian in the Pacific Ocean. At points east of the date-line the calendar day is 1 day earlier than at places to the west of

the line. At a point just west of the date-line, let us suppose it is 18<sup>h</sup> or 6 P.M., L.C.T., on Aug. 1. At the same moment it is 12<sup>h</sup> at long. 90° E., 6<sup>h</sup> at long. 0°, and 0<sup>h</sup> at long. 90° W., all of the same date, Aug. 1. West of long. 90° W., it is not yet 0<sup>h</sup> (midnight); hence between 90° W. and 180° the date must be July 31. As one crosses the date-line going eastward his watch remains the same but the date changes abruptly to 1 day earlier, so the traveler repeats part of a calendar day. As one crosses the line going westward the date changes abruptly to one day later, causing him to omit a calendar day. (According to actual practice, the change is made at night regardless of the true moment of crossing.)

## On Using the Following Calendar Pages

*Sun fast and sun slow.* This is the equation of time, as previously discussed.

*Sunrise and sunset.* For accurate results, two corrections to the tabular values are necessary: (1) interpolation for latitude, and (2) reduction to standard time. When the observer is at a latitude between two given latitudes, he computes a time for sunrise or sunset that lies between the times shown for the given latitudes. (Our table of longitudes and latitudes is a guide for one's position, but a large atlas may be consulted.) For example, on Nov. 6 the sun rises at 6:34 A.M. at lat. 35° and at 6:44 at lat. 40°, the difference being +10<sup>m</sup>. An observer at Richmond, Va., lat. 37°33', would be about 0.5 the distance between 35° and 40°.  $(0.5)(+10^m) = +5^m$ , and therefore at Richmond sunrise occurs at 6:34 + 5<sup>m</sup> or 6:39 A.M., L.C.T. The station (long. 77°29' W.) is 2°29' or 2.5° west of the 75° standard meridian;  $2.5(+4^m) = +10^m$ ; 6:39 + 10<sup>m</sup> = 6:49 A.M., E.S.T., sunrise time.

In the sun and moon tables, the data has to be given in LOCAL CIVIL TIME. This is *not* standard time, but has to be reduced to standard time.

To reduce local civil time to standard time, decrease the L.C.T. by 4<sup>m</sup> for every degree the station is east of the standard meridian, or increase the L.C.T. by 4<sup>m</sup> for every degree the station is west of the standard meridian.

*Moonrise and moonset.* For accurate results at any station in the U. S., three corrections are needed: (1) interpolation for latitude, (2) correction for longitudes west of 82½°, and (3) reduction to standard time.

(1) Interpolation for latitude follows the same method as for the sun.

(2) Use of the *a-factor*. The moon tables are exact for the given latitudes and for longitude 75° W. The *a-factor* adapts them to any longitude in the U. S. For observers in the eastern states and as far west as long. 82½° [Port Huron, Mich., Mans-

field, Ohio, Huntington, W. Va., Asheville, N. C., Tampa, Fla.], no *a-factor* is used. For stations in the 90° zone, between 82½° and 97½°, use the *a-factor* in the column "90°". The "*a-factor*, moonrise" is always to be added to the time of moonrise as derived from the main tables, and the "*a-factor*, moonset" is added to the time of moonset as derived. The boundary at 97½°, between the 90° and the 105° zones, runs through Grafton, N. Dak., Webster, S. Dak., Norfolk, Nebr., Salina, Kans., Oklahoma City, Okla., Fort Worth and Corpus Christi, Tex. Observers in the 105° zone, between 97½° and 112½° long., will use the "105°" *a-factor*, and those west of 112½° will use the "120°" *a-factor*, the eastern boundary (112½°) of the 120° zone going through Butte, Mont., Pocatello, Idaho, Panguitch, Utah, and Prescott, Ariz. These zones do *not* correspond to the irregular divisions of the standard-time belts.

(3) Change L.C.T. to standard time.

*Ex.*, find moonrise on May 15 at Walla Walla, Wash., long. 118°21' W., lat. 46°4' N. (a) Moonrise for lat. 35° is 0:42 A.M.; for 40°, 0:47; for 45°, 0:53. The increase is +5<sup>m</sup> between 35° and 40°, and 6<sup>m</sup> between 40° and 45°; hence use 7<sup>m</sup> for 45° to 50°. W.W. is  $\frac{1}{5}$  the distance between 45° and 50°.  $\frac{1}{5}(+7^m) = 1\frac{2}{5}$  or +1<sup>m</sup>. 0:53 + 1<sup>m</sup> = 0:54. (b) The *a-factor*, moonrise, is 3<sup>m</sup>; 0:54 + 3<sup>m</sup> = 0:57 A.M., L.C.T. (c) Reduce to standard time. 120° - 118°21' = 1°39' = 1°.65 east of the 120° meridian.  $1.65(-4^m) = -6^m.6 = -7^m$ ; 0:57 - 7<sup>m</sup> = 0:50 A.M., P.S.T., moonrise at Walla Walla.

*Moon's transit.* This data indicates the local civil time of the moon crossing the observer's meridian. The time is the same for all latitudes. It is nearly correct for all longitudes in the U. S.; for more exact work use—for every day—a mean *a-factor* of 2<sup>m</sup>, 4<sup>m</sup>, 6<sup>m</sup>. That is, for the 75° zone, use no correction; for the 90° zone add 2<sup>m</sup> to the time in the tables; for the 105° zone add 4<sup>m</sup>; for the 120° zone add 6<sup>m</sup>. Afterward, reduce the L.C.T. to standard time.



# JANUARY

## 1955

Jan.		Sun slow	LOCAL CIVIL TIME Latitude 30° n.				LOCAL CIVIL TIME Latitude 35° n.				LOCAL CIVIL TIME Latitude 40° n.				LOCAL CIVIL TIME Latitude 45° n.				a- factor, moonset		Moon's upper transit
			Sun- rise	Sun- set	Moon- rise	Moon- set	Sun- rise	Sun- set	Moon- rise	Moon- set	Sun- rise	Sun- set	Moon- rise	Moon- set	Sun- rise	Sun- set	Moon- rise	Moon- set			
			m s	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	90°
1 Sat.	3 14	6 56	5 11	11 22	h m	7 8	4 59	11 18	h m	7 22	4 45	11 13	h m	7 38	4 28	11 8	h m	5 53	3	6	9
2 Sun.	3 42	6 56	5 12	11 58	0 32	7 8	5 0	11 52	0 37	7 22	4 46	11 44	0 44	7 39	4 29	11 35	0 52	6 44	3	6	9
3 Mon.	4 10	6 56	5 12	12 40	1 37	7 8	5 0	12 30	1 46	7 22	4 46	12 20	1 55	7 39	4 30	12 7	2 7	7 39	3	6	9
4 Tue.	4 38	6 57	5 13	1 28	2 44	7 9	5 1	1 16	2 56	7 22	4 47	1 2	3 9	7 39	4 31	12 47	3 24	8 39	3	6	9
5 Wed.	5 5	6 57	5 14	2 25	3 53	7 9	5 2	2 10	4 6	7 22	4 48	1 54	4 22	7 38	4 32	1 36	4 40	9 41	3	6	9
6 Thu.	5 32	6 57	5 14	3 27	5 0	7 9	5 3	3 13	5 14	7 22	4 49	2 57	5 30	7 38	4 33	2 38	5 49	10 45	3	5	8
7 Fri.	5 59	6 57	5 15	4 33	6 2	7 9	5 4	4 21	6 14	7 22	4 50	4 6	6 30	7 38	4 34	3 49	6 48	11 47	2	4	7
8 Sat.	6 25	6 57	5 16	5 42	6 56	7 9	5 4	5 32	7 8	7 22	4 51	5 18	7 21	7 38	4 35	5 4	7 36	11 47	2	4	7
9 Sun.	6 50	6 57	5 17	6 49	7 42	7 9	5 5	6 41	7 51	7 22	4 52	6 32	8 1	7 38	4 36	6 20	8 14	10 45	2	3	4
10 Mon.	7 15	6 57	5 18	7 53	8 22	7 9	5 6	7 47	8 29	7 22	4 53	7 41	8 36	7 38	4 38	7 34	8 45	1 39	1	2	4
11 Tue.	7 39	6 57	5 18	8 53	8 58	7 9	5 7	8 51	9 1	7 22	4 54	8 48	9 6	7 37	4 39	8 45	9 11	2 29	1	2	3
12 Wed.	8 3	6 57	5 19	9 52	9 31	7 9	5 8	9 52	9 32	7 22	4 55	9 52	9 32	7 37	4 40	9 53	9 34	3 16	1	2	3
13 Thu.	8 26	6 57	5 20	10 47	10 2	7 8	5 9	10 51	10 0	7 21	4 56	10 55	9 58	7 36	4 41	10 59	9 56	4 0	1	2	3
14 Fri.	8 49	6 57	5 21	11 42	10 33	7 8	5 10	11 49	10 28	7 21	4 57	11 55	10 23	7 36	4 42	10 18	10 43	1 2	3	4	5
15 Sat.	9 11	6 57	5 22	.....	11 5	7 8	5 11	.....	10 57	7 21	4 58	.....	10 50	7 36	4 43	0 3	10 41	5 26	1	2	3
16 Sun.	9 32	6 57	5 23	0 37	11 38	7 8	5 12	0 46	11 29	7 20	4 59	0 55	11 19	7 35	4 45	1 6	11 7	6 10	1	3	4
17 Mon.	9 53	6 57	5 24	1 32	12 15	7 8	5 13	1 43	12 4	7 20	5 0	1 54	11 51	7 34	4 46	2 9	11 36	6 55	2	3	4
18 Tue.	10 13	6 56	5 24	2 26	12 56	7 7	5 14	2 39	12 43	7 19	5 2	2 53	12 29	7 34	4 47	3 9	12 12	7 42	2	3	5
19 Wed.	10 32	6 56	5 25	3 20	1 41	7 7	5 15	3 34	1 27	7 19	5 3	3 49	1 11	7 33	4 49	4 7	12 52	8 31	2	4	6
20 Thu.	10 51	6 56	5 26	4 12	2 31	7 6	5 16	4 26	2 17	7 18	5 4	4 42	2 1	7 32	4 50	5 1	1 41	9 22	2	5	7
21 Fri.	11 9	6 56	5 27	5 2	3 26	7 6	5 17	5 15	3 12	7 18	5 5	5 30	2 57	7 32	4 51	5 50	2 38	10 13	3	5	7
22 Sat.	11 26	6 56	5 28	5 47	4 22	7 6	5 18	6 0	4 11	7 17	5 6	6 13	3 58	7 31	4 52	6 29	3 42	11 3	3	5	8
23 Sun.	11 42	6 55	5 29	6 29	5 21	7 5	5 19	6 39	5 12	7 17	5 7	6 51	5 2	7 30	4 54	7 4	4 48	11 53	3	5	8
24 Mon.	11 58	6 55	5 30	7 7	6 21	7 5	5 20	7 15	6 15	7 16	5 8	7 24	6 7	7 29	4 55	7 35	5 58	12 42	3	5	8
25 Tue.	12 13	6 54	5 30	7 43	7 21	7 4	5 21	7 48	7 17	7 15	5 10	7 55	7 13	7 28	4 57	8 1	7 8	1 29	3	5	8
26 Wed.	12 27	6 54	5 31	8 17	8 22	7 4	5 22	8 19	8 20	7 15	5 11	8 23	8 19	7 28	4 58	8 26	8 18	2 16	3	6	8
27 Thu.	12 40	6 54	5 32	8 50	9 23	7 3	5 23	8 50	9 25	7 14	5 12	8 50	9 27	7 27	4 59	8 49	9 29	3 3	3	6	8
28 Fri.	12 53	6 53	5 33	9 24	10 25	7 2	5 24	9 21	10 30	7 13	5 13	9 17	10 36	7 26	5 1	9 13	10 41	3 51	3	6	9
29 Sat.	13 4	6 53	5 34	10 0	11 29	7 2	5 25	9 54	11 37	7 12	5 14	9 48	11 46	7 25	5 2	9 40	11 56	4 41	3	6	9
30 Sun.	13 15	6 52	5 35	10 40	.....	7 1	5 26	10 32	.....	7 12	5 16	10 20	.....	7 24	5 4	10 9	.....	5 34	3	6	9
31 Mon.	13 25	6 52	5 36	11 24	0 35	7 0	5 27	11 13	0 45	7 11	5 17	11 0	0 57	7 22	5 5	10 45	1 11	6 30	3	6	9

Moon's  
phases

EST.  
d h m

1 3 29  
2 15 5 13  
3 23 8 6  
4 31 0 5

C.S.T.  
d h m

1 2 29  
2 15 5 13  
3 23 8 6  
4 31 0 5

M.S.T.  
d h m

1 1 29  
2 8 5 44  
3 15 3 13  
4 23 6 6

P.S.T.  
d h m

1 12 29  
2 8 4 44  
3 15 2 13  
4 23 5 6

5 30 9 5

# FEBRUARY

## 1955

Moons  
phases

E.S.T.  
d h m  
○ 6 8 43  
☾ 14 2 40  
● 22 10 54

C.S.T.  
d h m  
○ 6 7 43  
☾ 14 1 40  
● 22 9 54

M.S.T.  
d h m  
○ 6 6 43  
☾ 14 12 40  
● 22 8 54

P.S.T.  
d h m  
○ 6 5 43  
☾ 14 11 40  
● 22 7 54

Feb.	Sun slow	LOCAL CIVIL TIME Latitude 30° n.				LOCAL CIVIL TIME Latitude 35° n.				LOCAL CIVIL TIME Latitude 40° n.				LOCAL CIVIL TIME Latitude 45° n.				a- factor, moonset		Moon's upper transit		
		Sun- rise		Moon- rise		Sun- rise		Moon- rise		Sun- rise		Moon- rise		Sun- rise		Moon- rise						
		90°	105°	120°	90°	105°	120°	90°	105°	120°	90°	105°	120°	90°	105°	120°	90°	105°	120°			
1 Tue.	m s	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m		
2 Wed.	13 34	2 4	7	6 51	12 15	1 41	5 28	12 3	5 29	11 57	6 58	12 13	5 36	12 15	1 41	5 28	12 3	5 29	11 57	6 58		
3 Thu.	13 42	3 5	8	6 50	13 12	2 46	6 59	1 0	3 1	7 9	5 18	12 43	2 9	7 20	5 6	11 29	2 26	6 9	11 29	2 26		
4 Fri.	13 50	3 6	9	6 50	13 38	2 17	6 58	5 30	2 3	7 8	5 20	1 47	4 17	7 19	5 9	1 29	4 37	5 7	1 29	4 37		
5 Sat.	13 56	3 6	9	6 49	13 53	2 22	6 58	5 32	4 43	7 6	5 22	2 57	5 11	7 18	5 11	2 41	5 28	4 6	5 11	2 41		
6 Sun.	14 2	3 6	9	6 49	14 29	5 32	6 57	5 31	4 19	7 6	5 23	4 8	5 54	7 17	5 12	3 56	6 8	3 5	5 12	3 56		
7 Mon.	14 7	3 6	9	6 48	15 33	6 15	6 56	5 33	5 27	7 5	5 24	5 19	6 32	7 15	5 14	5 10	6 42	1	5 14	5 10		
8 Tue.	14 11	3 5	8	6 47	16 36	6 53	6 55	5 34	6 32	6 58	7 4	5 25	6 28	7 4	7 14	5 15	6 23	7 10	1	5 15	6 23	
9 Wed.	14 14	3 5	8	6 47	17 36	7 28	6 54	5 35	7 35	7 29	7 2	5 26	7 33	7 32	7 13	5 16	7 32	7 35	1	5 16	7 32	
10 Thu.	14 17	3 5	8	6 46	18 34	8 0	6 53	5 36	8 35	7 59	7 0	5 28	8 37	7 58	7 11	5 18	8 40	7 58	1	5 18	8 40	
11 Fri.	14 18	3 5	8	6 45	19 30	8 31	6 52	5 37	9 34	8 28	7 0	5 29	9 40	8 24	7 10	5 19	9 46	8 21	1	5 19	9 46	
12 Sat.	14 19	3 5	7	6 44	20 26	9 3	6 51	5 38	10 33	8 57	6 59	5 30	10 41	8 51	7 9	5 21	10 50	8 43	1	5 21	10 50	
13 Sun.	14 20	3 5	7	6 44	21 21	9 36	6 50	5 39	11 31	9 28	6 58	5 31	11 41	9 19	7 7	5 22	11 54	9 36	1	5 22	11 54	
14 Mon.	14 19	2 5	7	6 43	22 16	10 12	6 49	5 40	12 23	10 2	6 57	5 32	12 31	9 50	7 6	5 24	12 42	10 36	1	5 24	12 42	
15 Tue.	14 18	2 5	7	6 42	23 10	10 52	6 48	5 41	1 28	10 40	6 56	5 34	0 41	10 25	7 4	5 25	0 56	10 9	5 35	2	5 25	0 56
16 Wed.	14 16	2 5	7	6 41	24 5	11 35	6 47	5 42	1 23	11 22	6 54	5 35	1 38	11 6	7 3	5 26	1 56	10 48	2	5 26	1 56	
17 Thu.	14 13	2 4	6	6 40	25 49	12 23	6 46	5 43	2 17	12 9	6 53	5 36	2 33	11 53	7 1	5 28	2 51	11 34	2	5 28	2 51	
18 Fri.	14 9	2 4	6	6 39	26 50	1 14	6 45	5 44	3 7	1 1	6 52	5 37	3 23	12 46	7 0	5 29	3 42	12 27	3	5 29	3 42	
19 Sat.	14 5	2 3	5	6 38	27 50	2 10	6 44	5 45	3 53	1 57	6 51	5 38	4 8	1 44	6 58	5 31	4 26	1 27	3	5 31	4 26	
20 Sun.	14 0	2 3	4	6 37	28 51	3 8	6 43	5 46	4 34	2 58	6 49	5 40	4 47	2 46	6 57	5 32	5 2	2 32	3	5 32	5 2	
21 Mon.	13 55	1 3	4	6 36	29 52	4 8	6 42	5 47	5 12	4 4	6 48	5 41	5 23	3 51	6 55	5 34	5 35	3 40	3	5 34	5 35	
22 Tue.	13 49	1 2	4	6 36	30 53	5 40	6 41	5 48	5 47	5 3	6 47	5 42	5 54	4 57	6 54	5 35	6 2	4 50	3	5 35	6 2	
23 Wed.	13 42	1 2	3	6 35	31 53	6 16	6 40	5 48	6 20	6 8	6 45	5 43	6 24	6 5	6 52	5 36	6 28	6 2	3	6 52	6 28	
24 Thu.	13 35	1 2	3	6 34	32 54	6 50	6 38	5 49	6 51	7 13	6 44	5 44	6 52	7 14	6 50	5 38	6 53	7 14	3	6 53	7 14	
25 Fri.	13 27	1 2	4	6 33	33 55	7 25	6 37	5 50	7 23	8 19	6 42	5 45	7 20	8 24	6 47	5 39	7 17	8 29	3	6 47	8 29	
26 Sat.	13 18	1 3	4	6 32	34 56	8 1	6 36	5 51	7 56	9 27	6 41	5 46	7 51	9 35	6 45	5 40	7 44	9 44	3	6 45	9 44	
27 Sun.	13 9	2 3	5	6 30	35 56	8 41	6 35	5 52	8 32	10 36	6 40	5 47	8 24	10 47	6 45	5 42	8 13	11 0	3	6 45	10 47	
28 Mon.	12 59	2 4	5	6 29	36 57	9 24	6 34	5 53	9 13	11 45	6 38	5 49	9 1	11 59	6 44	5 43	8 47	12 0	3	6 44	11 59	
	12 48	2 4	5	6 28	37 58	10 13	6 32	5 54	10 1	12 45	6 37	5 50	9 46	12 58	6 42	5 44	9 29	0 16	3	6 42	12 58	

# MARCH 1955

Mar.		Sun slow	LOCAL CIVIL TIME Latitude 30° n.				LOCAL CIVIL TIME Latitude 35° n.				LOCAL CIVIL TIME Latitude 40° n.				LOCAL CIVIL TIME Latitude 45° n.				Moon's upper transit	a- factor, moonset	Moon's phases																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
			Sun rise	Sun set	Moon rise	Moon set	Sun rise	Sun set	Moon rise	Moon set	Sun rise	Sun set	Moon rise	Moon set	Sun rise	Sun set	Moon rise	Moon set																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
		m s	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m



# APRIL 1955

Apr.	LOCAL CIVIL TIME Latitude 30° n.				LOCAL CIVIL TIME Latitude 35° n.				LOCAL CIVIL TIME Latitude 40° n.				LOCAL CIVIL TIME Latitude 45° n.				Moon's upper transit	a- factor, moonset 90° 105° 120°
	a- factor, moonrise		Sun- rise	Moon- rise	Moon- set	Sun- rise	Moon- rise	Moon- set	Sun- rise	Moon- rise	Moon- set	Sun- rise	Moon- rise	Moon- set				
	90°	105° 120°																
Sun slow	m	s	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	
1 Fri.	4	12	3	6	8	5	51	6	18	1	14	2	10	5	20	5	46	
2 Sat.	3	54	3	5	8	5	50	6	19	2	15	2	9	2	20	5	47	
3 Sun.	3	36	3	5	8	5	48	6	19	2	15	2	9	2	20	5	48	
4 Mon.	3	19	3	5	8	5	47	6	20	4	12	3	59	4	20	5	49	
5 Tue.	3	1	3	5	8	5	46	6	20	5	9	4	30	5	21	6	0	
6 Wed.	2	43	3	5	8	5	45	6	21	6	5	5	2	5	22	6	1	
7 Thu.	2	26	3	5	8	5	44	6	22	7	0	5	34	6	23	7	2	
8 Fri.	2	9	3	5	7	5	42	6	22	7	55	6	8	6	24	8	3	
9 Sat.	1	52	2	5	7	5	41	6	23	8	50	6	45	6	25	9	4	
10 Sun.	1	35	2	4	7	5	41	6	24	9	45	7	26	6	26	10	5	
11 Mon.	1	19	2	4	6	5	39	6	24	10	36	8	10	5	30	11	6	
12 Tue.	1	3	2	4	5	5	38	6	25	11	25	8	59	6	31	12	7	
13 Wed.	0	47	2	3	5	5	37	6	25	9	50	5	32	6	30	13	8	
14 Thu.	0	32	2	3	5	5	36	6	26	0	10	10	40	5	31	14	9	
15 Fri.	0	16	1	3	4	5	34	6	26	0	51	11	44	5	32	15	10	
16 Sat.	F.A.S.T.	1	3	4	5	33	6	27	1	30	12	38	5	28	6	32	16	11
17 Sun.	0	13	1	2	4	5	32	6	28	2	6	1	36	5	27	6	33	17
18 Mon.	0	27	1	2	3	5	31	6	28	2	40	2	37	5	26	6	34	18
19 Tue.	0	40	1	2	4	5	30	6	29	3	15	3	38	5	24	6	35	19
20 Wed.	0	54	1	3	4	5	29	6	30	3	51	4	43	5	23	6	36	20
21 Thu.	1	6	1	3	4	5	28	6	30	4	29	5	51	5	22	6	36	21
22 Fri.	1	19	2	3	5	5	27	6	31	5	10	7	1	5	21	6	37	22
23 Sat.	1	31	2	4	6	5	26	6	31	5	58	8	11	5	20	6	38	23
24 Sun.	1	42	2	4	6	5	25	6	32	6	52	9	21	5	18	6	39	24
25 Mon.	1	53	3	5	8	5	24	6	33	7	52	10	24	5	17	6	40	25
26 Tue.	2	4	3	6	9	5	23	6	33	8	56	11	20	5	16	6	40	26
27 Wed.	2	14	3	6	9	5	22	6	34	10	2	...	...	5	15	6	41	27
28 Thu.	2	32	3	6	8	5	21	6	35	11	7	0	8	5	14	6	42	28
29 Fri.	2	32	3	5	8	5	20	6	35	12	9	0	50	5	13	6	43	29
30 Sat.	2	41	3	5	8	5	19	6	36	1	9	1	27	5	11	6	44	30

# MAY

## 1955

May	LOCAL CIVIL TIME Latitude 30° n.			LOCAL CIVIL TIME Latitude 35° n.			LOCAL CIVIL TIME Latitude 40° n.			LOCAL CIVIL TIME Latitude 45° n.			a- factor, moonrise			Moon's upper transit	Moon- rise set			Moon- rise set			Moon- rise set			Moon's phases	E.S.T. d h m 6 5 14 14 8 42 21 3 58 28 9 1	C.S.T. d h m 6 4 14 14 7 42 21 2 53 28 8 1	M.S.T. d h m 6 3 14 14 6 42 21 1 58 28 7 1	P.S.T. d h m 6 2 14 14 5 42 21 12 52 28 6 1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
	Sun fast	a- factor, moonrise		Sun- rise set	Moon- rise set	Sun- rise set	Moon- rise set	Sun- rise set	Moon- rise set	Sun- rise set	Moon- rise set	Sun- rise set	Moon- rise set	Moon's upper transit	a- factor, moonset		90°	105°	120°																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
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# JUNE

## 1955

June		LOCAL CIVIL TIME Latitude 30° n.				LOCAL CIVIL TIME Latitude 35° n.				LOCAL CIVIL TIME Latitude 40° n.				LOCAL CIVIL TIME Latitude 45° n.				Moon's phases																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
		Sun fast		Sun-rise		Moon-rise		Moon-set		Sun-rise		Moon-rise		Moon-set		Moon's upper transit																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
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MOON'S PHASES

E.S.T.

C.S.T.

M.S.T.

P.S.T.



# JULY 1955

Moon's  
phases

E.S.T.

d h m  
○ 5 0 28  
☾ 12 3 31  
● 19 6 34  
☾ 26 10 59

C.S.T.

d h m  
○ 4 11 28  
☾ 12 2 31  
● 19 5 34  
☾ 26 9 59

M.S.T.

d h m  
○ 4 10 28  
☾ 12 1 31  
● 19 4 34  
☾ 26 8 59

P.S.T.

d h m  
○ 4 9 28  
☾ 12 12 31  
● 19 3 34  
☾ 26 7 59

July	Sun slow	LOCAL CIVIL TIME Latitude 30° n.				LOCAL CIVIL TIME Latitude 35° n.				LOCAL CIVIL TIME Latitude 40° n.				LOCAL CIVIL TIME Latitude 45° n.				Moon's upper transit	a- factor, moonset 90° 105° 120°																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
		Sun- rise	Sun- set	Moon- rise	Moon- set	Sun- rise	Sun- set	Moon- rise	Moon- set	Sun- rise	Sun- set	Moon- rise	Moon- set	Sun- rise	Sun- set	Moon- rise	Moon- set																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
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1829	h 1841	h 1853	h 1865	h 1877	h 1889	h 1901	h 1913	h 1925	h 1937	h 1949	h 1961	h 1973	h 1985	h 1997	h 2009	h 2021	h 2033	h 2045	h 2057	h 2069	h 2081	h 2093	h 2105	h 2117	h 2129	h 2141	h 2153	h 2165	h 2177	h 2189	h 2201	h 2213	h 2225	h 2237	h 2249	h 2261	h 2273	h 2285	h 2297	h 2309	h 2321	h 2333	h 2345	h 2357	h 2369	h 2381	h 2393	h 2405	h 2417	h 2429	h 2441	h 2453	h 2465	h 2477	h 2489	h 2501	h 2513	h 2525	h 2537	h 2549	h 2561	h 2573	h 2585	h 2597	h 2609	h 2621	h 2633	h 2645	h 2657	h 2669	h 2681	h 2693	h 2705	h 2717	h 2729	h 2741	h 2753	h 2765	h 2777	h 2789	h 2801	h 2813	h 2825	h 2837	h 2849	h 2861	h 2873	h 2885	h 2897	h 2909	h 2921	h 2933	h 2945	h 2957	h 2969	h 2981	h 2993	h 3005	h 3017	h 3029	h 3041	h 3053	h 3065	h 3077	h 3089	h 3101	h 3113	h 3125	h 3137	h 3149	h 3161	h 3173	h 3185	h 3197	h 3209	h 3221	h 3233	h 3245	h 3257	h 3269	h 3281	h 3293	h 3305	h 3317	h 3329	h 3341	h 3353	h 3365	h 3377	h 3389	h 3401	h 3413	h 3425	h 3437	h 3449	h 3461	h 3473	h 3485	h 3497	h 3509	h 3521	h 3533	h 3545	h 3557	h 3569	h 3581	h 3593	h 3605	h 3617	h 3629	h 3641	h 3653	h 3665	h 3677	h 3689	h 3701	h 3713	h 3725	h 3737	h 3749	h 3761	h 3773	h 3785	h 3797	h 3809	h 3821	h 3833	h 3845	h 3857	h 3869	h 3881	h 3893	h 3905	h 3917	h 3929	h 3941	h 3953	h 3965	h 3977	h 3989	h 4001	h 4013	h 4025	h 4037	h 4049	h 4061	h 4073	h 4085	h 4097	h 4109	h 4121	h 4133	h 4145	h 4157	h 4169	h 4181	h 4193	h 4205	h 4217	h 4229	h 4241	h 4253	h 4265	h 4277	h 4289	h 4301	h 4313	h 4325	h 4337	h 4349	h 4361	h 4373	h 4385	h 4397	h 4409	h 4421	h 4433	h 4445	h 4457	h 4469	h 4481	h 4493	h 4505	h 4517	h 4529	h 4541	h 4553	h 4565	h 4577	h 4589	h 4601	h 4613	h 4625	h 4637	h 4649	h 4661	h 4673	h 4685	h 4697	h 4709	h 4721	h 4733	h 4745	h 4757	h 4769	h 4781	h 4793	h 4805	h 4817	h 4829	h 4841	h 4853	h 4865	h 4877	h 4889	h 4901	h 4913	h 4925	h 4937	h 4949	h 4961	h 4973	h 4985	h 4997	h 5009	h 5021	h 5033	h 5045	h 5057	h 5069	h 5081	h 5093	h 5105	h 5117	h 5129	h 5141	h 5153	h 5165	h 5177	h 5189	h 5201	h 5213	h 5225	h 5237	h 5249	h 5261	h 5273	h 5285	h 5297	h 5309	h 5321	h 5333	h 5345	h 5357	h 5369	h 5381	h 5393	h 5405	h 5417	h 5429	h 5441	h 5453	h 5465	h 5477	h 5489	h 5501	h 5513	h 5525	h 5537	h 5549	h 5561	h 5573	h 5585	h 5597	h 5609	h 5621	h 5633	h 5645	h 5657	h 5669	h 5681	h 5693	h 5705	h 5717	h 5729	h 5741	h 5753	h 5765	h 5777	h 5789	h 5801	h 5813	h 5825	h 5837	h 5849	h 5861	h 5873	h 5885	h 5897	h 5909	h 5921	h 5933	h 5945	h 5957	h 5969	h 5981	h 5993	h 6005	h 6017	h 6029	h 6041	h 6053	h 6065	h 6077	h 6089	h 6101	h 6113	h 6125	h 6137	h 6149	h 6161	h 6173	h 6185	h 6197	h 6209	h 6221	h 6233	h 6245	h 6257	h 6269	h 6281	h 6293	h 6305	h 6317	h 6329	h 6341	h 6353	h 6365	h 6377	h 6389	h 6401	h 6413	h 6425	h 6437	h 6449	h 6461	h 6473	h 6485	h 6497	h 6509	h 6521	h 6533	h 6545	h 6557	h 6569	h 6581	h 6593	h 6605	h 6617	h 6629	h 6641	h 6653	h 6665	h 6677	h 6689	h 6701	h 6713	h 6725	h 6737	h 6749	h 6761	h 6773	h 6785	h 6797	h 6809	h 6821	h 6833	h 6845	h 6857	h 6869	h 6881	h 6893	h 6905	h 6917	h 6929	h 6941	h 6953	h 6965	h 6977	h 6989	h 7001	h 7013	h 7025	h 7037	h 7049	h 7061	h 7073	h 7085	h 7097	h 7109	h 7121	h 7133	h 7145	h 7157	h 7169	h 7181	h 7193	h 7205	h 7217	h 7229	h 7241	h 7253	h 7265	h 7277	h 7289	h 7301	h 7313	h 7325	h 7337	h 7349	h 7361	h 7373	h 7385	h 7397	h 7409	h 7421	h 7433	h 7445	h 7457	h 7469	h 7481	h 7493	h 7505	h 7517	h 7529	h 7541	h 7553	h 7565	h 7577	h 7589	h 7601	h 7613	h 7625	h 7637	h 7649	h 7661	h 7673	h 7685	h 7697	h 7709	h 7721	h 7733	h 7745	h 7757	h 7769	h 7781	h 7793	h 7805	h 7817	h 7829	h 7841	h 7853	h 7865	h 7877	h 7889	h 7901	h 7913	h 7925	h 7937	h 7949	h 7961	h 7973	h 7985	h 7997	h 8009	h 8021	h 8033	h 8045	h 8057	h 8069	h 8081	h 8093	h 8105	h 8117	h 8129	h 8141	h 8153	h 8165	h 8177	h 8189	h 8201	h 8213	h 8225	h 8237	h 8249	h 8261	h 8273	h 8285	h 8297	h 8309	h 8321	h 8333	h 8345	h 8357	h 8369	h 8381	h 8393	h 8405	h 8417	h 8429	h 8441	h 8453	h 8465	h 8477	h 8489	h 8501	h 8513	h 8525	h 8537	h 8549	h 8561	h 8573	h 8585	h 8597	h 8609	h 8621	h 8633	h 8645	h 8657	h 8669	h 8681	h 8693	h 8705	h 8717	h 8729	h 8741	h 8753	h 8765	h 8777	h 8789	h 8801	h 8813	h 8825	h 8837	h 8849	h 8861	h 8873	h 8885	h 8897	h 8909	h 8921	h 8933	h 8945	h 8957	h 8969	h 8981	h 8993	h 9005	h 9017	h 9029	h 9041	h 9053	h 9065	h 9077	h 9089	h 9101	h 9113	h 9125	h 9137	h 9149	h 9161	h 9173	h 9185	h 9197	h 9209	h 9221	h 9233	h 9245	h 9257	h 9269	h 9281	h 9293	h 9305	h 9317	h 9329	h 9341	h 9353	h 9365	h 9377	h 9389	h 9401	h 9413	h 9425	h 9437	h 9449	h 9461	h 9473	h 9485	h 9497	h 9509	h 9521	h 9533	h 9545	h 9557	h 9569	h 9581	h 9593	h 9605	h 9617	h 9629	h 9641	h 9653	h 9665	h 9677	h 9689	h 9701	h 9713	h 9725	h 9737	h 9749	h 9761	h 9773	h 9785	h 9797	h 9809	h 9821	h 9833	h 9845	h 9857	h 9869	h 9881	h 9893	h 9905	h 9917	h 9929	h 9941	h 9953	h 9965	h 9977	h 9989	h 10001	h 10013	h 10025	h 10037	h 10049	h 10061	h 10073	h 10085	h 10097	h 10109	h 10121	h 10133	h 10145	h 10157	h 10169	h 10181	h 10193	h 10205	h 10217	h 10229	h 10241	h 10253	h 10265	h 10277	h 10289	h 10301	h 10313	h 10325	h 10337	h 10349	h 10361	h 10373	h 10385	h 10397	h 10409	h 10421	h 10433	h 10445	h 10457	h 10469	h 10481	h 10493	h 10505	h 10517	h 10529	h 10541	h 10553	h 10565	h 10577	h 10589	h 10601	h 10613	h 10625	h 10637	h 10649	h 10661	h 10673	h 10685	h 10697	h 10709	h 10721	h 10733	h 10745	h 10757	h 10769	h 10781	h 10793	h 10805	h 10817	h 10829	h 10841	h 10853	h 10865	h 10877	h 10889	h 10901	h 10913	h 10925	h 10937	h 10949	h 10961	h 10973	h 10985	h 10997	h 11009	h 11021	h 11033	h 11045	h 11057	h 11069	h 11081	h 11093	h 11105	h 11117	h 11129	h 11141	h 11153	h 11165	h 11177	h 11189	h 11201	h 11213	h 11225	h 11237	h 11249	h 11261	h 11273	h 11285	h 11297	h 11309	h 11321	h 11333	h 11345	h 11357	h 11369	h 11381	h 11393	h 11405	h 11417	h 11429	h 11441	h 11453	h 11465	h 11477	h 11489	h 11501	h 11513	h 11525	h 11537	h 11549	h 11561	h 11573	h 11585	h 11597	h 11609	h 11621	h 11633	h 11645	h 11657	h 11669	h 11681	h 11693	h 11705	h 11717	h 11729	h 11741	h 11753	h 11765	h 11777	h 11789	h 11801	h 11813	h 11825	h 11837	h 11849	h 11861	h 11873	h 11885	h 11897	h 11909	h 11921	h 11933	h 11945	h 11957	h 11969	h 11981	h 11993	h 12005	h 12017	h 12029	h 12041	h 12053	h 12065	h 12077	h 12089	h 12101	h 12113	h 12125	h 12137	h 12149	h 12161	h 12173	h 12185	h 12197	h 12209	h 12221	h 12233	h 12245	h 12257	h 12269	h 12281	h 12293	h 12305	h 12317	h 12329	h 12341	h 12353	h 12365	h 12377	h 12389	h 12401	h 12413	h 12425	h 12437	h 12449	h 12461	h 12473	h 12485	h 12497	h 12509	h 12521	h 12533	h 12545	h 12557	h 12569	h 12581	h 12593	h 12605	h 12617	h 12629	h 12641	h 12653	h 12665	h 12677	h 12689	h 12701	h 12713	h 12725	h 12737	h 12749	h 12761	h 12773	h 12785	h 12797	h 12809	h 12821	h 12833	h 12845	h 12857	h 12869	h 12881	h

# AUGUST 1955

Moon's  
phases

E.S.T.

d h m.  
○ 3 2 30  
☾ 10 9 33  
☾ 17 2 56  
☾ 25 3 51

G.S.T.

d h m.  
○ 3 1 30  
☾ 10 8 33  
☾ 17 1 58  
☾ 25 2 51

M.S.T.

d h m.  
○ 3 12 30  
☾ 10 7 33  
☾ 17 12 58  
☾ 25 1 51

P.S.T.

d h m.  
○ 3 11 30  
☾ 10 6 33  
☾ 17 11 53  
☾ 25 0 51

Aug.	Sun slow	a- factor, moonrise		LOCAL CIVIL TIME Latitude 30° n.			LOCAL CIVIL TIME Latitude 35° n.			LOCAL CIVIL TIME Latitude 40° n.			LOCAL CIVIL TIME Latitude 45° n.			Moon's upper transit	a- factor, moonset
	m s	m	m	Sun- rise	Sun- set	Moon- rise	Moon- set	Sun- rise	Sun- set	Moon- rise	Moon- set	Sun- rise	Sun- set	Moon- rise	Moon- set	90°	105° 120°
1 Mon.	6 17	1	3	5 18	6 54	5 26	6 14	5 8	7 4	5 37	6 3	4 57	7 15	5 49	2 49	m	m
2 Tue.	6 14	2	3	5 19	6 53	5 6	6 10	5 9	7 3	6 14	4 0	4 58	7 14	6 25	3 48	2	5
3 Wed.	6 10	1	2	5 19	6 52	6 42	5 7	5 10	7 2	6 49	4 58	4 59	7 13	6 56	4 46	3	5
4 Thu.	6 5	1	2	5 20	6 52	7 16	6 4	5 11	7 1	7 20	5 58	5 0	7 12	7 26	5 51	3	5
5 Fri.	6 0	1	2	5 20	6 51	7 49	7 1	5 11	7 0	7 51	6 58	5 1	7 10	7 53	6 54	1	6
6 Sat.	5 54	1	2	5 21	6 50	8 22	7 59	5 12	6 59	8 20	7 59	5 2	7 9	8 20	7 58	3	5
7 Sun.	5 47	1	2	5 22	6 49	8 55	8 58	5 13	6 58	8 52	9 0	5 3	7 8	8 48	9 3	4	5
8 Mon.	5 40	1	3	5 22	6 48	9 32	9 59	5 14	6 57	9 25	10 4	5 4	7 7	9 19	10 10	5	6
9 Tue.	5 33	2	3	5 23	6 48	10 12	11 1	5 15	6 56	10 2	11 9	5 5	7 6	9 52	11 18	6	7
10 Wed.	5 24	2	4	5 24	6 47	10 56	12 6	5 15	6 55	10 45	12 16	5 6	7 5	10 33	12 27	3	6
11 Thu.	5 16	2	5	5 24	6 46	11 49	1 11	5 16	6 54	11 36	1 23	5 6	7 3	11 20	1 36	4	5
12 Fri.	5 6	3	5	5 25	6 45	.....	2 15	5 17	6 53	.....	2 28	5 7	7 2	.....	2 44	5	6
13 Sat.	4 56	3	5	5 25	6 44	0 47	3 16	5 17	6 52	0 34	3 30	5 8	7 1	0 18	3 44	6	7
14 Sun.	4 46	3	6	5 26	6 43	1 51	4 12	5 18	6 51	1 38	4 24	5 9	7 0	1 24	4 37	7	8
15 Mon.	4 35	3	6	5 26	6 42	2 57	5 1	5 19	6 50	2 47	5 11	5 10	6 58	2 34	5 21	8	9
16 Tue.	4 24	3	6	5 27	6 41	4 5	5 45	5 20	6 48	3 57	5 52	5 11	6 57	3 46	6 0	9	10
17 Wed.	4 12	3	6	5 28	6 40	5 12	6 24	5 21	6 47	5 6	6 29	5 12	6 56	4 59	6 33	10	11
18 Thu.	3 59	3	6	5 28	6 39	6 16	7 0	5 21	6 46	6 13	7 2	5 13	6 54	6 9	7 4	11	12
19 Fri.	3 46	3	5	5 29	6 38	7 17	7 35	5 22	6 45	7 18	7 33	5 16	6 53	7 18	7 33	12	13
20 Sat.	3 33	3	5	5 29	6 37	8 17	8 9	5 23	6 44	8 21	8 5	5 15	6 51	8 24	8 1	13	14
21 Sun.	3 19	3	5	5 30	6 36	9 16	8 43	5 23	6 42	9 21	8 37	5 16	6 50	9 28	8 29	14	15
22 Mon.	3 4	3	5	5 31	6 35	10 14	9 19	5 24	6 41	10 21	9 10	5 17	6 48	10 31	9 1	15	16
23 Tue.	2 49	3	5	5 31	6 34	11 10	9 58	5 25	6 40	11 20	9 47	5 18	6 47	11 31	9 35	16	17
24 Wed.	2 34	2	5	5 32	6 33	12 5	10 39	5 26	6 39	12 16	10 27	5 19	6 46	12 31	10 14	17	18
25 Thu.	2 18	2	4	5 32	6 32	12 59	11 25	5 26	6 38	1 11	11 12	5 20	6 44	1 26	10 57	18	19
26 Fri.	2 2	2	4	5 33	6 31	1 49	.....	5 27	6 36	2 2	.....	5 21	6 43	2 18	11 46	19	20
27 Sat.	1 45	2	4	5 33	6 29	2 37	0 14	5 28	6 35	2 50	0 1	5 22	6 41	3 4	.....	20	21
28 Sun.	1 28	2	3	5 34	6 28	3 23	1 6	5 29	6 34	3 33	0 53	5 23	6 40	4 40	5 16	21	22
29 Mon.	1 10	1	3	5 34	6 27	4 2	2 1	5 29	6 32	4 12	1 49	5 24	6 38	4 23	1 36	22	23
30 Tue.	0 52	1	3	5 35	6 26	4 39	2 57	5 30	6 31	4 48	2 47	5 24	6 36	4 56	2 37	23	24
31 Wed.	0 34	1	2	5 36	6 25	5 15	3 54	5 31	6 30	5 21	3 47	5 25	6 35	5 27	3 39	24	25

# SEPTEMBER 1955

LOCAL CIVIL TIME Latitude 30° n.										LOCAL CIVIL TIME Latitude 35° n.										LOCAL CIVIL TIME Latitude 40° n.										LOCAL CIVIL TIME Latitude 45° n.										Moon's phases																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
a- factor, moonrise			Sun- rise			Moon- rise			Moon- set			Sun- rise			Moon- rise			Moon- set			Sun- rise			Moon- rise			Moon- set			Moon's upper transit			a- factor, moonset																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
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# OCTOBER

## 1955

OCTOBER 1955										Moon's phases		a- factor, moonrise		LOCAL CIVIL TIME Latitude 30° n.				LOCAL CIVIL TIME Latitude 35° n.				LOCAL CIVIL TIME Latitude 40° n.				LOCAL CIVIL TIME Latitude 45° n.				Moon's upper transit		a- factor, moonset																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
Sun [fast]		90°		105°		120°		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set		Sun rise		Moon- rise		Moon- set</	

Moon's  
phases

EST.

d h m

○ 1 2 17

● 8 9 4

○ 15 2 32

● 23 6 4

○ 31 1 4

C.S.T.

d h m

○ 1 17

● 8 8 4

○ 15 1 32

● 23 5 4

○ 31 0 4

M.S.T.

d h m

○ 1 17

● 8 7 4

○ 15 12 32

● 23 4 4

○ 30 11 4

P.S.T.

d h m

○ 1 17

● 8 6 4

○ 15 11 32

● 23 3 4

○ 30 10 4

# NOVEMBER 1955

Nov.	Sun fast	LOCAL CIVIL TIME Latitude 30° n.						LOCAL CIVIL TIME Latitude 35° n.						LOCAL CIVIL TIME Latitude 40° n.						LOCAL CIVIL TIME Latitude 45° n.								
		a- factor, moonrise			Sun			Moon			Sun			Moon			Sun			Moon			Sun			Moon		
		90°	105°	120°	rise	set	h m	rise	set	h m	rise	set	h m	rise	set	h m	rise	set	h m	rise	set	h m	rise	set	h m	rise	set	h m
1 Tue.	m s	2	5	7	6:13	7:43	6:20	5:7	6:13	7:54	6:28	4:59	5:59	6:37	4:50	5:43	6:37	4:50	5:43	6:37	4:50	5:43	6:37	4:50	5:43	6:37	4:50	
2 Wed.	16 22	3	5	8	6:14	7:26	6:21	5:6	7:14	9:3	6:29	4:58	6:59	9:17	6:38	4:48	6:42	9:35	4:48	6:42	9:35	4:48	6:42	9:35	4:48	6:42	9:35	
3 Thu.	16 24	3	6	9	6:15	8:31	6:22	5:5	8:19	10:6	6:30	4:57	8:4	10:19	6:40	4:47	7:48	10:37	4:47	7:48	10:37	4:47	7:48	10:37	4:47	7:48	10:37	
4 Fri.	16 24	3	6	9	6:16	9:37	6:23	5:4	9:26	10:59	6:31	4:56	9:14	11:13	6:41	4:46	8:59	11:28	4:46	8:59	11:28	4:46	8:59	11:28	4:46	8:59	11:28	
5 Sat.	16 23	3	6	9	6:16	10:43	6:24	5:3	10:34	11:46	6:32	4:54	10:25	11:56	6:42	4:44	10:13	12:8	4:44	10:13	12:8	4:44	10:13	12:8	4:44	10:13	12:8	
6 Sun.	16 22	3	6	8	6:17	11:47	6:25	5:2	11:40	12:26	6:34	4:53	11:34	12:34	6:44	4:43	11:26	12:43	4:43	11:26	12:43	4:43	11:26	12:43	4:43	11:26	12:43	
7 Mon.	16 20	3	5	8	6:18	12:57	6:26	5:1	12:40	1:13	6:35	4:52	1:7	1:7	6:45	4:42	1:13	6:25	4:42	1:13	6:25	4:42	1:13	6:25	4:42	1:13	6:25	
8 Tue.	16 16	3	5	8	6:19	1:33	6:27	5:0	1:22	1:34	6:36	4:51	0:41	1:37	6:47	4:40	0:36	1:39	6:47	4:40	0:36	1:39	6:47	4:40	0:36	1:39	6:47	
9 Wed.	16 12	3	5	8	6:19	2:7	6:28	5:0	1:47	2:5	6:37	4:50	1:46	2:5	6:48	4:39	1:45	2:3	6:48	4:39	1:45	2:3	6:48	4:39	1:45	2:3	6:48	
10 Thu.	16 8	3	5	8	6:20	2:45	6:29	4:59	2:47	2:36	6:38	4:49	2:49	2:32	6:49	4:38	2:53	2:28	6:49	4:38	2:53	2:28	6:49	4:38	2:53	2:28	6:49	
11 Fri.	16 2	3	5	8	6:21	3:42	6:30	4:58	3:46	3:8	6:39	4:48	3:52	3:1	6:51	4:37	3:59	2:54	6:51	4:37	3:59	2:54	6:51	4:37	3:59	2:54	6:51	
12 Sat.	15 55	3	5	8	6:22	4:39	6:31	4:57	4:46	3:48	6:40	4:47	4:54	3:32	6:52	4:36	5:4	3:21	6:52	4:36	5:4	3:21	6:52	4:36	5:4	3:21	6:52	
13 Sun.	15 48	2	5	7	6:23	5:35	6:32	4:57	5:44	4:18	6:42	4:46	5:55	4:7	6:53	4:34	6:53	4:34	6:53	4:34	6:53	4:34	6:53	4:34	6:53	4:34	6:53	
14 Mon.	15 40	2	5	7	6:24	5:30	6:33	4:56	6:42	4:58	6:43	4:46	6:54	4:45	6:55	4:33	7:9	4:28	6:55	4:33	7:9	4:28	6:55	4:33	7:9	4:28	6:55	
15 Tue.	15 31	2	4	7	6:24	5:25	6:34	4:55	7:37	5:43	6:44	4:45	7:51	5:28	6:56	4:32	8:7	5:11	6:56	4:32	8:7	5:11	6:56	4:32	8:7	5:11	6:56	
16 Wed.	15 21	2	4	6	6:25	5:4	6:34	4:55	8:28	6:31	6:45	4:44	8:43	6:16	6:58	4:31	9:0	5:59	6:58	4:31	9:0	5:59	6:58	4:31	9:0	5:59	6:58	
17 Thu.	15 10	2	4	5	6:26	5:4	6:35	4:54	9:16	7:22	6:46	4:43	9:30	7:8	6:59	4:30	9:48	6:52	4:30	9:48	6:52	4:30	9:48	6:52	4:30	9:48	6:52	
18 Fri.	14 58	2	3	4	6:27	5:9	6:36	4:53	9:59	8:16	6:47	4:42	10:12	8:4	7:0	4:29	10:27	7:49	4:29	10:27	7:49	4:29	10:27	7:49	4:29	10:27	7:49	
19 Sat.	14 46	1	3	4	6:28	5:3	6:37	4:53	10:37	9:12	6:48	4:42	10:49	9:1	7:2	4:28	11:2	8:49	4:28	11:2	8:49	4:28	11:2	8:49	4:28	11:2	8:49	
20 Sun.	14 32	1	2	4	6:28	5:2	6:38	4:52	11:13	10:9	6:50	4:41	11:22	10:0	7:3	4:28	11:33	9:50	4:28	11:33	9:50	4:28	11:33	9:50	4:28	11:33	9:50	
21 Mon.	14 18	1	2	3	6:29	5:2	6:39	4:52	11:45	11:5	6:51	4:40	11:52	11:0	7:4	4:27	11:59	10:53	4:27	11:59	10:53	4:27	11:59	10:53	4:27	11:59	10:53	
22 Tue.	14 4	1	2	3	6:30	5:2	6:40	4:51	12:16	12:16	6:52	4:40	12:20	10:0	7:6	4:26	12:24	11:58	4:26	12:24	11:58	4:26	12:24	11:58	4:26	12:24	11:58	
23 Wed.	13 48	1	2	3	6:31	5:1	6:41	4:51	12:46	0:3	6:53	4:39	12:47	0:1	7:7	4:25	12:49	6:51	4:25	12:49	6:51	4:25	12:49	6:51	4:25	12:49	6:51	
24 Thu.	13 31	1	2	4	6:32	5:1	6:42	4:50	1:17	1:3	6:54	4:39	1:15	1:3	7:8	4:24	1:13	1:3	7:36	4:24	1:13	1:3	7:36	4:24	1:13	1:3	7:36	
25 Fri.	13 14	1	3	4	6:33	5:1	6:43	4:50	1:49	2:5	6:55	4:38	1:45	2:8	7:9	4:24	1:39	2:13	4:24	1:39	2:13	4:24	1:39	2:13	4:24	1:39	2:13	
26 Sat.	12 56	2	3	5	6:34	5:1	6:44	4:50	2:25	3:10	6:56	4:38	2:18	3:17	7:11	4:23	2:8	3:24	4:23	2:8	3:24	4:23	2:8	3:24	4:23	2:8	3:24	
27 Sun.	12 38	2	4	6	6:34	5:0	6:45	4:50	3:7	4:19	6:57	4:37	2:56	4:28	7:12	4:22	2:44	4:39	4:22	2:44	4:39	4:22	2:44	4:39	4:22	2:44	4:39	
28 Mon.	12 18	2	4	7	6:35	5:0	6:46	4:49	3:56	5:29	6:58	4:37	3:43	5:41	7:13	4:22	2:38	5:56	4:22	2:38	5:56	4:22	2:38	5:56	4:22	2:38	5:56	
29 Tue.	11 58	3	5	8	6:36	5:0	6:47	4:49	4:49	6:39	7:0	4:36	4:39	6:54	7:14	4:21	2:42	7:11	4:21	2:42	7:11	4:21	2:42	7:11	4:21	2:42	7:11	
30 Wed.	11 38	3	6	9	6:37	5:0	6:48	4:49	5:59	7:47	7:1	4:36	5:45	8:2	7:16	4:21	2:57	8:19	4:21	2:57	8:19	4:21	2:57	8:19	4:21	2:57	8:19	

Moon's  
phases

E.S.T.  
d h m

14 7 1  
22 12 29  
29 11 50

C.S.T.  
d h m

14 6 1  
22 11 29  
29 10 50

M.S.T.  
d h m

14 5 1  
22 10 29  
29 9 50

P.S.T.  
d h m

14 4 1  
22 9 29  
29 8 50

# DECEMBER

## 1955

Dec.	Sun fast	LOCAL CIVIL TIME Latitude 30° n.				LOCAL CIVIL TIME Latitude 35° n.				LOCAL CIVIL TIME Latitude 40° n.				LOCAL CIVIL TIME Latitude 45° n.				Moon's upper transit		a-factor, moonset	
		Sun-rise	Sun-set	Moon-rise	Moon-set	Sun-rise	Sun-set	Moon-rise	Moon-set	Sun-rise	Sun-set	Moon-rise	Moon-set	Sun-rise	Sun-set	Moon-rise	Moon-set	h m	m	90°	105°
1 Thu.	m 11 16	h 6 38	5 0	7 20	8 34	h 6 49	4 49	7 9	8 47	h 7 2	4 36	6 55	9 1	h 7 17	4 20	6 40	9 17	1 24	2 4	m	120°
2 Fri.	10 54	6 38	5 0	8 29	9 39	6 50	4 48	8 20	9 39	7 3	4 36	8 8	9 50	7 18	4 20	7 56	10 5	2 27	2 4	m	120°
3 Sat.	10 31	6 39	5 0	9 36	10 16	6 51	4 48	9 29	10 23	7 4	4 35	9 21	10 32	7 19	4 20	9 12	10 43	3 25	2 3	m	120°
4 Sun.	10 8	6 40	5 0	10 40	10 57	6 51	4 48	10 36	11 2	7 5	4 35	10 31	11 8	7 20	4 19	10 26	11 15	4 19	1 3	m	120°
5 Mon.	9 44	6 41	5 0	11 40	11 34	6 52	4 48	11 40	11 37	7 6	4 35	11 39	11 39	7 21	4 19	11 36	11 42	5 10	1 2	m	120°
6 Tue.	9 19	6 42	5 0	.....	12 8	6 53	4 48	.....	12 8	7 7	4 35	.....	12 8	7 22	4 19	.....	12 8	5 58	1 2	m	120°
7 Wed.	8 54	6 42	5 0	0 40	12 42	6 54	4 48	0 41	12 39	7 8	4 35	0 43	12 36	7 24	4 19	0 42	12 32	6 44	1 2	m	120°
8 Thu.	8 28	6 43	5 0	1 37	1 15	6 55	4 48	1 41	1 13	7 8	4 35	1 46	1 4	7 25	4 18	1 52	12 57	7 29	1 2	m	120°
9 Fri.	8 2	6 44	5 0	2 34	1 50	6 56	4 48	2 40	1 43	7 9	4 35	2 48	1 35	7 26	4 18	2 56	1 24	8 14	1 3	m	120°
10 Sat.	7 35	6 44	5 0	3 30	2 27	6 56	4 48	3 38	2 18	7 10	4 35	3 48	2 7	7 27	4 18	4 0	1 55	9 0	2 3	m	120°
11 Sun.	7 8	6 45	5 1	4 25	3 8	6 57	4 49	4 36	2 57	7 11	4 35	4 48	2 44	7 27	4 18	5 2	2 29	9 48	2 3	m	120°
12 Mon.	6 40	6 46	5 1	5 19	3 52	6 58	4 49	5 31	3 40	7 12	4 35	5 44	3 25	7 28	4 18	6 1	3 9	10 36	2 4	m	120°
13 Tue.	5 44	6 46	5 1	6 11	4 39	6 59	4 49	6 23	4 26	7 13	4 35	6 38	4 12	7 29	4 18	6 55	3 54	11 25	2 4	m	120°
14 Wed.	5 15	6 47	5 2	7 1	5 30	6 59	4 49	7 13	5 17	7 13	4 35	7 27	5 3	7 30	4 19	7 44	4 45	12 14	2 4	m	120°
15 Thu.	5 15	6 48	5 2	7 46	6 22	7 0	4 50	7 58	6 10	7 14	4 36	8 11	5 57	7 31	4 19	8 27	5 41	1 2	5	m	120°
16 Fri.	4 46	6 48	5 2	8 27	7 15	7 1	4 50	8 38	7 6	7 15	4 36	8 49	6 54	7 32	4 19	9 4	6 41	1 50	2	m	120°
17 Sat.	4 17	6 49	5 2	9 5	8 9	7 1	4 50	9 14	8 2	7 16	4 36	9 23	7 52	7 32	4 19	9 35	7 42	2 35	2	m	120°
18 Sun.	3 48	6 50	5 3	9 40	9 3	7 2	4 50	9 46	8 58	7 16	4 36	9 54	8 51	7 33	4 20	10 3	8 44	3 20	2	m	120°
19 Mon.	3 18	6 50	5 3	10 13	9 58	7 3	4 51	10 17	9 55	7 17	4 37	10 23	9 51	7 34	4 20	10 28	9 46	4 3	3	m	120°
20 Tue.	2 48	6 51	5 4	10 45	10 53	7 3	4 51	10 47	10 52	7 17	4 37	10 49	10 52	7 34	4 20	10 52	10 51	4 46	3	m	120°
21 Wed.	2 19	6 51	5 4	11 17	11 49	7 4	4 52	11 16	11 51	7 18	4 38	11 16	11 53	7 35	4 21	11 15	11 56	5 30	3	m	120°
22 Thu.	1 49	6 52	5 5	11 50	.....	7 4	4 52	11 47	.....	7 18	4 38	11 43	.....	7 35	4 21	11 39	.....	6 15	3	m	120°
23 Fri.	1 19	6 52	5 5	12 26	0 48	7 5	4 53	12 20	0 52	7 19	4 39	12 14	0 58	7 36	4 22	12 6	1 4	7 4	4	m	120°
24 Sat.	0 49	6 53	5 6	1 5	1 49	7 5	4 53	12 57	1 57	7 19	4 39	12 48	2 5	7 36	4 22	12 37	2 14	7 57	3	m	120°
25 Sun.	0 19	6 53	5 6	1 51	2 54	7 6	4 54	1 40	3 4	7 20	4 40	1 29	3 15	7 37	4 23	1 15	3 28	8 54	3	m	120°
26 Mon.	SLOW	6 54	5 7	2 45	4 1	7 6	4 54	2 32	4 12	7 20	4 40	2 19	4 26	7 37	4 24	2 3	4 42	9 56	3	m	120°
27 Tue.	0 40	6 54	5 7	3 47	5 9	7 6	4 55	3 34	5 22	7 21	4 41	3 19	5 37	7 37	4 24	3 1	5 54	11 0	3	m	120°
28 Wed.	1 10	6 55	5 8	4 54	6 12	7 7	4 56	4 41	6 26	7 21	4 42	4 27	6 41	7 38	4 25	4 11	6 58	.....	2	m	120°
29 Thu.	1 39	6 55	5 9	6 4	7 12	7 7	4 56	5 53	7 24	7 21	4 42	5 41	7 36	7 38	4 26	5 27	7 52	0 7	2	m	120°
30 Fri.	2 8	6 55	5 9	7 14	8 4	7 8	4 57	7 6	8 13	7 22	4 43	6 57	8 24	7 38	4 26	6 46	8 35	1 7	2	m	120°
31 Sat.	2 37	6 56	5 10	8 23	8 50	7 8	4 58	8 17	8 56	7 22	4 44	8 11	9 3	7 38	4 27	8 4	9 12	2 6	1	m	120°

Moon's phases

E.S.T.

d h m

● 14 2 7

● 22 4 39

○ 28 10 44

C.S.T.

d h m

● 14 1 7

● 22 3 39

○ 28 9 44

M.S.T.

d h m

● 6 1 35

● 14 0 7

● 22 2 39

○ 28 8 44

P.S.T.

d h m

● 6 0 35

● 13 11 7

● 22 1 39

○ 28 7 44



# Longitude and Latitude of Foreign Cities and Time Corresponding to 12:00 Noon, E.S.T.

City	Long.	Lat.	Time	City	Long.	Lat.	Time
	° /	° /			° /	° /	
Aberdeen, Scotland.....	2 9 w	57 9 n	5:00 p.m.	Lima, Peru.....	77 2 w	12 0 s	12:00 noon
Adelaide, Australia.....	138 36 e	34 55 s	2:30 a.m.*	Lisbon, Portugal.....	9 9 w	38 44 n	5:00 p.m.
Algiers, Algeria.....	3 0 e	36 50 n	5:00 p.m.	Liverpool, England.....	3 0 w	53 25 n	5:00 p.m.
Amsterdam, Netherlands...	4 53 e	52 22 n	5:00 p.m.	London, England.....	0 5 w	51 32 n	5:00 p.m.
Ankara, Turkey.....	32 55 e	39 55 n	7:00 p.m.	Lyon, France.....	4 50 e	45 45 n	5:00 p.m.
Asunción, Paraguay.....	57 40 w	25 15 s	1:00 p.m.	Madrid, Spain.....	3 42 w	40 26 n	5:00 p.m.
Athens, Greece.....	23 43 e	37 58 n	7:00 p.m.	Makassar, Celebes.....	119 30 e	5 9 s	1:00 a.m.*
Auckland, New Zealand.....	174 45 e	36 52 s	5:00 a.m.*	Manchester, England.....	2 15 w	53 30 n	5:00 p.m.
Bangkok, Thailand.....	100 30 e	13 45 n	0:00 a.m.*	Manila, Philippines.....	120 57 e	14 35 n	1:00 a.m.*
Bogotá, Colombia.....	2 9 e	41 23 n	5:00 p.m.	Marseille, France.....	5 20 e	43 20 n	5:00 p.m.
Belém, Brazil.....	48 29 w	1 28 s	2:00 p.m.	Mazatlán, Mexico.....	106 25 w	23 12 n	11:00 a.m.
Belfast, Northern Ireland...	5 56 w	54 37 n	5:00 p.m.	Mecca, Saudi Arabia.....	39 45 e	21 29 n	8:00 p.m.
Belgrade, Yugoslavia.....	20 32 e	44 52 n	6:00 p.m.	Melbourne, Australia.....	144 58 e	37 47 s	3:00 a.m.*
Berlin, Germany.....	13 25 e	52 30 n	6:00 p.m.	Mexico City, Mexico.....	99 7 w	19 26 n	11:00 a.m.
Birmingham, England.....	1 55 w	52 25 n	5:00 p.m.	Milan, Italy.....	9 10 e	45 27 n	6:00 p.m.
Bogotá, Colombia.....	74 15 w	4 32 n	12:00 noon	Montevideo, Uruguay.....	56 10 w	34 53 s	1:30 p.m.
Bombay, India.....	72 48 e	19 0 n	10:30 p.m.	Moscow, U.S.S.R.....	37 36 e	55 45 n	7:00 p.m.
Bordeaux, France.....	0 31 w	44 50 n	5:00 p.m.	Munich, Germany.....	11 35 e	48 8 n	6:00 p.m.
Bremen, Germany.....	8 49 e	53 5 n	6:00 p.m.	Nagasaki, Japan.....	129 57 e	32 48 n	2:00 a.m.*
Brisbane, Australia.....	153 8 e	27 29 s	3:00 a.m.*	Nagoya, Japan.....	136 56 e	35 7 n	2:00 a.m.*
Bristol, England.....	2 35 w	51 28 n	5:00 p.m.	Nairobi, Kenya.....	36 55 e	1 25 n	8:00 p.m.
Brussels, Belgium.....	4 22 e	50 52 n	5:00 p.m.	Nanking, China.....	118 53 e	32 3 n	1:00 a.m.*
Bucharest, Rumania.....	26 7 e	44 25 n	7:00 p.m.	Naples, Italy.....	14 15 e	40 50 n	6:00 p.m.
Budapest, Hungary.....	19 5 e	47 30 n	6:00 p.m.	Newcastle-on-Tyne, Eng...	1 37 w	54 58 n	5:00 p.m.
Buenos Aires, Argentina.....	58 22 w	34 35 s	1:00 p.m.	Odessa, U.S.S.R.....	30 48 e	46 27 n	7:00 p.m.
Cairo, Egypt.....	31 21 w	30 2 n	7:00 p.m.	Osaka, Japan.....	135 30 e	34 32 n	2:00 a.m.*
Calcutta, India.....	88 24 e	22 34 n	10:30 p.m.	Oslo, Norway.....	10 42 e	59 57 n	6:00 p.m.
Canton, China.....	113 15 e	23 7 n	1:00 a.m.*	Panamá City, Panamá.....	79 32 w	8 58 n	12:00 noon
Cape Town, U. of S. Af.....	18 22 e	33 55 s	7:00 p.m.	Paramaribo, Surinam.....	55 15 w	5 45 n	1:30 p.m.
Caracas, Venezuela.....	67 2 w	10 28 n	12:30 p.m.	Paris, France.....	2 20 e	48 48 n	5:00 p.m.
Cayenne, French Guiana.....	52 18 w	4 49 n	1:30 p.m.	Peiping, China.....	116 25 e	39 55 n	1:00 a.m.*
Chihuahua, Mexico.....	106 5 w	28 37 n	11:00 a.m.	Perth, Australia.....	115 52 e	31 57 s	1:00 a.m.*
Chungking, China.....	106 34 e	29 46 n	0:00 a.m.*	Plymouth, England.....	4 5 w	50 25 n	5:00 p.m.
Copenhagen, Denmark.....	12 34 e	55 40 n	6:00 p.m.	Port Moresby, Papua Ter...	147 8 e	9 25 s	3:00 a.m.*
Córdoba, Argentina.....	64 10 w	31 28 s	1:00 p.m.	Prague, Czechoslovakia.....	14 26 e	50 5 n	6:00 p.m.
Dakar, French West Africa...	17 28 w	14 40 n	4:00 p.m.	Rangoon, Burma.....	96 0 e	16 50 n	11:30 p.m.
Darwin, Australia.....	130 51 e	12 28 s	2:30 a.m.*	Reykjavik, Iceland.....	21 58 w	64 4 n	4:00 p.m.
Dublin, Ireland.....	6 15 w	53 20 n	5:00 p.m.	Rio de Janeiro, Brazil.....	43 12 w	22 57 s	2:00 p.m.
Durban, U. of S. Af.....	30 53 e	29 53 s	7:00 p.m.	Rome, Italy.....	12 27 e	41 54 n	6:00 p.m.
Edinburgh, Scotland.....	3 10 w	55 55 n	5:00 p.m.	San Juan, Puerto Rico.....	66 10 w	18 30 n	1:00 p.m.
Frankfurt, Germany.....	8 41 e	50 7 n	6:00 p.m.	Santiago, Chile.....	70 45 w	33 28 s	1:00 p.m.
Georgetown, British Guiana...	58 15 w	6 45 n	1:30 p.m.	São Paulo, Brazil.....	46 31 w	23 31 s	2:00 p.m.
Glasgow, Scotland.....	4 15 w	55 50 n	5:00 p.m.	São Salvador, Brazil.....	38 27 w	12 56 s	2:00 p.m.
Guatemala City, Guatemala...	90 31 w	14 37 n	11:00 a.m.	Shanghai, China.....	121 28 e	31 10 n	1:00 a.m.*
Guayaquil, Ecuador.....	79 56 w	2 10 s	12:00 noon	Singapore, British Malaya...	103 55 e	1 14 n	0:30 a.m.*
Hamburg, Germany.....	10 2 e	53 33 n	6:00 p.m.	Sofia, Bulgaria.....	23 20 e	42 40 n	7:00 p.m.
Hammerfest, Norway.....	23 38 e	70 38 n	6:00 p.m.	Stockholm, Sweden.....	18 3 e	59 17 n	6:00 p.m.
Havana, Cuba.....	82 23 w	23 8 n	12:00 noon	Sydney, Australia.....	151 0 e	34 0 s	3:00 a.m.*
Helsinki, Finland.....	25 0 e	60 10 n	7:00 p.m.	Tananarive, Madagascar...	47 33 e	18 50 s	8:00 p.m.
Hobart, Tasmania.....	147 19 e	42 52 s	3:00 a.m.*	Teheran, Iran.....	51 45 e	35 45 n	8:30 p.m.
Iquique, Chile.....	70 7 w	20 10 s	1:00 p.m.	Tokyo, Japan.....	139 45 e	35 40 n	2:00 a.m.*
Irkutsk, U.S.S.R.....	104 20 e	52 30 n	0:00 a.m.*	Tripoli, Libya.....	13 12 e	32 57 n	6:00 p.m.
Jakarta, Java.....	106 48 e	6 16 s	1:00 a.m.*	Venice, Italy.....	12 20 e	45 26 n	6:00 p.m.
Jibuti, French Somaliland...	43 3 e	11 30 s	8:00 p.m.	Veracruz, Mexico.....	96 10 w	19 10 n	11:00 a.m.
Johannesburg, U. of S. Af...	28 4 e	26 12 s	7:00 p.m.	Vienna, Austria.....	16 20 e	48 14 n	6:00 p.m.
Kingston, Jamaica.....	76 49 w	17 59 n	12:00 noon	Vladivostok, U.S.S.R.....	132 0 e	43 10 n	2:00 a.m.*
La Paz, Bolivia.....	68 22 w	16 27 s	1:00 p.m.	Warsaw, Poland.....	21 0 e	52 14 n	6:00 p.m.
Leeds, England.....	1 30 w	53 45 n	5:00 p.m.	Wellington, New Zealand...	174 47 e	41 17 s	5:00 a.m.*
Leningrad, U.S.S.R.....	30 18 e	59 56 n	7:00 p.m.	Zürich, Switzerland.....	8 31 e	47 21 n	6:00 p.m.
Léopoldville, Belgian Congo...	15 17 e	4 18 s	6:00 p.m.				

\* On the following day.

## Longitude, Latitude, Time and Magnetic Declination of U. S. and Canadian Cities

The last column shows the magnetic declination or angle which the magnetic meridian makes with the true (geographic) meridian. The value being marked w or e, the north end of the compass needle points west or east respectively of true north by that number of degrees.

City	Long. w.	Lat. n.	Time*	Dec.	City	Long. w.	Lat. n.	Time*	Dec.
	° /	° /		°		° /	° /		°
Albany, N. Y.	73 45	42 40	12:00 noon	13 w	Milwaukee, Wis.	87 55	43 2	11:00 a.m.	2 e
Amarillo, Tex.	101 50	35 11	11:00 a.m.	12 e	Minneapolis, Minn.	93 14	44 59	11:00 a.m.	7 e
Atlanta, Ga.	84 23	33 45	12:00 noon	2 e	Mobile, Ala.	88 3	30 42	11:00 a.m.	5 e
Atlantic City, N. J.	74 25	39 22	12:00 noon	10 w	Montgomery, Ala.	86 18	32 21	11:00 a.m.	3 e
Austin, Nev.	117 4	39 29	9:00 a.m.	18 e	Montpelier, Vt.	72 32	44 15	12:00 noon	16 w
Baker, Oreg.	117 50	44 47	9:00 a.m.	21 e	Montreal, Que.	73 35	45 30	12:00 noon	16 w
Baltimore, Md.	76 38	39 18	12:00 noon	8 w	Moose Jaw, Sask.	105 31	50 37	10:00 a.m.	18 e
Bangor, Maine	68 47	44 48	12:00 noon	19 w	Nashville, Tenn.	86 47	36 10	11:00 a.m.	3 e
Birmingham, Ala.	86 50	33 30	11:00 a.m.	3 e	Needles, Calif.	114 36	34 50	9:00 a.m.	15 e
Bismarck, N. Dak.	100 47	46 48	11:00 a.m.	14 e	Nelson, B. C.	117 17	49 30	9:00 a.m.	23 e
Boise, Idaho	116 13	43 36	10:00 a.m.	19 e	New Haven, Conn.	72 55	41 19	12:00 noon	12 w
Boston, Mass.	71 5	42 21	12:00 noon	15 w	New Orleans, La.	90 4	29 57	11:00 a.m.	6 e
Buffalo, N. Y.	78 50	42 55	12:00 noon	7 w	New York, N. Y.	73 58	40 47	12:00 noon	12 w
Calgary, Alta.	114 1	51 1	10:00 a.m.	23 e	Nogales, Ariz.	110 56	31 21	10:00 a.m.	14 e
Carlsbad, N. Mex.	104 15	32 26	10:00 a.m.	13 e	Nome, Alaska	165 30	64 25	6:00 a.m.	19 e
Charleston, S. C.	79 56	32 47	12:00 noon	2 w	North Platte, Nebr.	100 46	41 8	11:00 a.m.	12 e
Charleston, W. Va.	81 38	38 21	12:00 noon	2 w	Oklahoma City, Okla.	97 28	35 26	11:00 a.m.	10 e
Charlotte, N. C.	80 50	35 14	12:00 noon	2 w	Ottawa, Ont.	75 43	45 24	12:00 noon	14 w
Cheyenne, Wyo.	104 52	41 9	10:00 a.m.	15 e	Philadelphia, Pa.	75 10	39 57	12:00 noon	10 w
Chicago, Ill.	87 37	41 50	11:00 a.m.	2 e	Phoenix, Ariz.	112 4	33 29	10:00 a.m.	15 e
Cincinnati, Ohio	84 30	39 8	12:00 noon	1 e	Pierre, S. Dak.	100 21	44 22	11:00 a.m.	12 e
Cleveland, Ohio	81 37	41 28	12:00 noon	5 w	Pittsburgh, Pa.	79 57	40 27	12:00 noon	5 w
Columbia, S. C.	81 2	34 0	12:00 noon	1 w	Port Arthur, Ont.	89 17	48 30	12:00 noon	1 e
Columbus, Ohio	83 1	40 0	12:00 noon	2 w	Portland, Maine	70 15	43 40	12:00 noon	17 w
Dallas, Tex.	96 46	32 46	11:00 a.m.	9 e	Portland, Oreg.	122 41	45 31	9:00 a.m.	23 e
Denver, Colo.	105 0	39 45	10:00 a.m.	14 e	Providence, R. I.	71 24	41 50	12:00 noon	15 w
Des Moines, Iowa	93 37	41 35	11:00 a.m.	7 e	Quebec, Que.	71 11	46 49	12:00 noon	20 w
Detroit, Mich.	83 3	42 20	12:00 noon	3 w	Raleigh, N. C.	78 39	35 46	12:00 noon	4 w
Dubuque, Iowa	90 40	42 31	11:00 a.m.	5 e	Reno, Nev.	119 49	39 30	9:00 a.m.	18 e
Duluth, Minn.	92 5	46 49	11:00 a.m.	7 e	Richfield, Utah	112 5	38 46	10:00 a.m.	17 e
Eastport, Maine	67 0	44 54	12:00 noon	21 w	Richmond, Va.	77 29	37 33	12:00 noon	6 w
El Centro, Calif.	115 33	32 38	9:00 a.m.	15 e	Roanoke, Va.	79 57	37 17	12:00 noon	3 w
El Paso, Tex.	106 29	31 46	11:00 a.m.	13 e	Sacramento, Calif.	121 30	38 35	9:00 a.m.	17 e
Eugene, Oreg.	123 5	44 3	9:00 a.m.	22 e	St. John, N. B.	66 10	45 18	1:00 p.m.	22 w
Fargo, N. Dak.	96 48	46 52	11:00 a.m.	10 e	St. Louis, Mo.	90 12	38 35	11:00 a.m.	5 e
Flagstaff, Ariz.	111 41	35 13	10:00 a.m.	15 e	Salmon, Idaho	113 54	45 11	10:00 a.m.	20 e
Fresno, Calif.	119 48	36 44	9:00 a.m.	17 e	Salt Lake City, Utah	111 54	40 46	10:00 a.m.	17 e
Garden City, Kans.	100 53	37 58	10:00 a.m.	13 e	San Antonio, Tex.	98 33	29 23	11:00 a.m.	10 e
Grand Junction, Colo.	108 33	39 5	10:00 a.m.	15 e	San Diego, Calif.	117 10	32 42	9:00 a.m.	15 e
Grand Rapids, Mich.	85 40	42 58	11:00 a.m.	1 e	San Francisco, Calif.	122 26	37 47	9:00 a.m.	18 e
Havre, Mont.	109 43	48 33	10:00 a.m.	20 e	Santa Fe, N. Mex.	105 57	35 41	10:00 a.m.	13 e
Helena, Mont.	112 2	46 35	10:00 a.m.	19 e	Sault Ste. Marie, Mich.	84 21	46 30	11:00 a.m.	4 w
Honolulu, Hawaii	157 50	21 18	7:00 a.m.	—	Savannah, Ga.	81 5	32 5	12:00 noon	0
Hogiam, Wash.	123 54	46 59	9:00 a.m.	23 e	Scranton, Pa.	75 39	41 24	12:00 noon	10 w
Hot Springs, Ark.	93 3	34 31	11:00 a.m.	8 e	Seattle, Wash.	122 20	47 37	9:00 a.m.	23 e
Idaho Falls, Idaho	112 1	43 30	10:00 a.m.	18 e	Shreveport, La.	93 42	32 28	11:00 a.m.	8 e
Indianapolis, Ind.	86 10	39 46	11:00 a.m.	1 e	Silver City, N. Mex.	108 18	32 46	10:00 a.m.	14 e
Jackson, Miss.	90 12	32 20	11:00 a.m.	7 e	Sioux Falls, S. Dak.	96 44	43 33	11:00 a.m.	11 e
Jacksonville, Fla.	81 40	30 22	12:00 noon	1 e	Sitka, Alaska	135 15	57 10	9:00 a.m.	30 e
Kansas City, Mo.	94 35	39 6	11:00 a.m.	9 e	Spokane, Wash.	117 26	47 40	9:00 a.m.	23 e
Key West, Fla.	81 48	24 33	12:00 noon	3 e	Springfield, Ill.	89 38	39 48	11:00 a.m.	4 e
Kingston, Ont.	76 30	44 15	12:00 noon	12 w	Springfield, Mass.	72 34	42 6	12:00 noon	14 w
Klamath Falls, Oreg.	121 44	42 10	9:00 a.m.	19 e	Springfield, Mo.	93 17	37 13	11:00 a.m.	7 e
Knoxville, Tenn.	83 56	35 57	11:00 a.m.	0	Syracuse, N. Y.	76 8	43 2	12:00 noon	11 w
Lander, Wyo.	108 40	42 50	10:00 a.m.	17 e	Tampa, Fla.	82 27	27 57	12:00 noon	2 e
Las Vegas, Nev.	115 12	36 10	9:00 a.m.	16 e	Toronto, Ont.	79 24	43 40	12:00 noon	8 w
Lewiston, Idaho	117 2	46 24	9:00 a.m.	21 e	Trinidad, Colo.	104 30	37 10	10:00 a.m.	14 e
Lincoln, Nebr.	96 40	40 50	11:00 a.m.	10 e	Victoria, B. C.	123 21	48 25	9:00 a.m.	24 e
London, Ont.	81 34	43 2	12:00 noon	5 w	Watertown, N. Y.	75 55	43 58	12:00 noon	13 w
Los Angeles, Calif.	118 15	34 3	9:00 a.m.	16 e	Wichita, Kans.	97 17	37 43	11:00 a.m.	10 e
Louisville, Ky.	85 46	38 15	11:00 a.m.	1 e	Wilmington, N. C.	77 57	34 14	12:00 noon	3 w
Manchester, N. H.	71 30	43 0	12:00 noon	16 w	Winnipeg, Man.	97 7	49 54	11:00 a.m.	11 e
Memphis, Tenn.	90 3	35 9	11:00 a.m.	6 e	Yakima, Wash.	120 33	46 34	9:00 a.m.	22 e
Miami, Fla.	80 12	25 46	12:00 noon	1 e					

\* Corresponding to 12:00 noon, E.S.T.

## The World Calendar

FIRST QUARTER							SECOND QUARTER							THIRD QUARTER							FOURTH QUARTER						
JANUARY							APRIL							JULY							OCTOBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	3	4	5	6	7
8	9	10	11	12	13	14	8	9	10	11	12	13	14	8	9	10	11	12	13	14	8	9	10	11	12	13	14
15	16	17	18	19	20	21	15	16	17	18	19	20	21	15	16	17	18	19	20	21	15	16	17	18	19	20	21
22	23	24	25	26	27	28	22	23	24	25	26	27	28	22	23	24	25	26	27	28	22	23	24	25	26	27	28
29	30	31					29	30	31					29	30	31					29	30	31				
FEBRUARY							MAY							AUGUST							NOVEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
				1	2	3	5	6	7	8	9	10	11	5	6	7	8	9	10	11	5	6	7	8	9	10	11
12	13	14	15	16	17	18	12	13	14	15	16	17	18	12	13	14	15	16	17	18	12	13	14	15	16	17	18
19	20	21	22	23	24	25	19	20	21	22	23	24	25	19	20	21	22	23	24	25	19	20	21	22	23	24	25
26	27	28	29	30			26	27	28	29	30			26	27	28	29	30			26	27	28	29	30		
MARCH							JUNE							SEPTEMBER							DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
					1	2					1	2						1	2						1	2	
3	4	5	6	7	8	9	3	4	5	6	7	8	9	3	4	5	6	7	8	9	3	4	5	6	7	8	9
10	11	12	13	14	15	16	10	11	12	13	14	15	16	10	11	12	13	14	15	16	10	11	12	13	14	15	16
17	18	19	20	21	22	23	17	18	19	20	21	22	23	17	18	19	20	21	22	23	17	18	19	20	21	22	23
24	25	26	27	28	29	30	24	25	26	27	28	29	30	24	25	26	27	28	29	30	24	25	26	27	28	29	30
													W*														W†

\* The Leap-Year World Holiday, W or June 31 (an extra day), follows June 30 in leap years only.

† The Year-End World Holiday, W or December 31 (365th day), follows December 30 every year.

### Exposition

The perpetual World Calendar divides the year into equal quarters of 91 days, or thirteen weeks, or three months, or approximately one season. The first month in each quarter contains 31 days. The other two months have 30 days each, every month having twenty-six weekdays plus Sundays. Every quarter with its monthly arrangement of 31-30-30 days begins on a Sunday, the first day of the week, and ends on a Saturday, the seventh day of the week, which is easy for business, accountants and educators because the closing day of every quarter does not fall on a Sunday. Every year begins logically on the accepted first day of the week, a Sunday, January 1.

The 364-day year is not complete however. The 365th day of the year, essential in keeping the calendar in step with the seasons, is the logical Year-End World Holiday, dated W or December 31, that

follows Saturday, December 30, every year. By giving the 365th day, the Year-End World Holiday, a name and date, a blank date is avoided. This World Holiday is an integral part of the year; it belongs to and completes the calendar.

The extra day in leap years is the Leap-Year World Holiday, dated W or June 31, and follows Saturday, June 30. By placing these two stabilizing days, the Leap-Year World Holiday in leap years at the end of the second quarter and the Year-End World Holiday every year at the end of the fourth quarter, the calendar in leap years becomes balanced, each half-year having 183 days. The calendar is thus stable.

Seventeen nations have already approved the World Calendar, including Afghanistan, Brazil, Chile, China, Czechoslovakia, Estonia, Greece, Hungary, Mexico, Norway, Panamá, Peru, Saudi Arabia, Spain, Syria, Turkey and Uruguay.

## Morning and Evening Stars and Planets in 1955

### MERCURY

Evening star, Jan. 1 to Feb. 12  
 Morning star, Feb. 12 to Apr. 22  
 Evening star, Apr. 22 to June 16  
 Morning star, June 16 to Aug. 5  
 Evening star, Aug. 5 to Oct. 13  
 Morning star, Oct. 13 to Dec. 4  
 Evening star, Dec. 4 to Dec. 31

### VENUS

Morning star, Jan. 1 to Sept. 1  
 Evening star, Sept. 1 to Dec. 31

### MARS

Evening star, Jan. 1 to Aug. 16  
 Morning star, Aug. 16 to Dec. 31



## Perpetual Calendar 1800-2000 A.D.

Day of the month	Jan. Oct.	Apr. Jul. Jan.	Sept. Dec.	Jun:	Feb. Mar. Nov.	Aug. Feb.	May	
1 8 15 22 29.....	A	B	C	D	E	F	G	Mon.
2 9 16 23 30.....	G	A	B	C	D	E	F	Tue.
3 10 17 24 31.....	F	G	A	B	C	D	E	Wed.
4 11 18 25.....	E	F	G	A	B	C	D	Thur.
5 12 19 26.....	D	E	F	G	A	B	C	Fri.
6 13 20 27.....	C	D	E	F	G	A	B	Sat.
7 14 21 28.....	B	C	D	E	F	G	A	Sun.
.....	.....	.....	1800	1801	1802	1803	.....	.....
1804	1805	1806	1807	.....	1808	1809	.....	.....
1810	1811	.....	1812	1813	1814	1815	.....	.....
.....	1816	1817	1818	1819	.....	1820	.....	.....
1821	1822	1823	.....	1824	1825	1826	.....	.....
1827	.....	1828	1829	1830	1831	.....	.....	.....
1832	1833	1834	1835	.....	1836	1837	.....	.....
1838	1839	.....	1840	1841	1842	1843	.....	.....
.....	1844	1845	1846	1847	.....	1848	.....	.....
1849	1850	1851	.....	1852	1853	1854	.....	.....
1855	.....	1856	1857	1858	1859	.....	.....	.....
1860	1861	1862	1863	.....	1864	1865	.....	.....
1866	1867	.....	1868	1869	1870	1871	.....	.....
.....	1872	1873	1874	1875	.....	1876	.....	.....
1877	1878	1879	.....	1880	1881	1882	.....	.....
1883	.....	1884	1885	1886	1887	.....	.....	.....
1888	1889	1890	1891	.....	1892	1893	.....	.....
1894	1895	.....	1896	1897	1898	1899	.....	.....
1900	1901	1902	1903	.....	1904	1905	.....	.....
1906	1907	.....	1908	1909	1910	1911	.....	.....
.....	1912	1913	1914	1915	.....	1916	.....	.....
1917	1918	1919	.....	1920	1921	1922	.....	.....
1923	.....	1924	1925	1926	1927	.....	.....	.....
1928	1929	1930	1931	.....	1932	1933	.....	.....
1934	1935	.....	1936	1937	1938	1939	.....	.....
.....	1940	1941	1942	1943	.....	1944	.....	.....
1945	1946	1947	.....	1948	1949	1950	.....	.....
1951	.....	1952	1953	1954	1955	.....	.....	.....
1956	1957	1958	1959	.....	1960	1961	.....	.....
1962	1963	.....	1964	1965	1966	1967	.....	.....
.....	1968	1969	1970	1971	.....	1972	.....	.....
1973	1974	1975	.....	1976	1977	1978	.....	.....
1979	.....	1980	1981	1982	1983	.....	.....	.....
1984	1985	1986	1987	.....	1988	1989	.....	.....
1990	1991	.....	1992	1993	1994	1995	.....	.....
.....	1996	1997	1998	1999	.....	2000	.....	.....

## EXAMPLES

(1) Given Nov. 20, 1891, to find the day of the week. Under Nov., opposite 20, is G. In the 1891 column, opposite G is Fri., *ans.*

(2) Given Fri., Oct. —, 1868, to find the possible days of the month. In the 1868 column, opposite Fri. is G. Under Oct., G gives 2, 9, 16, 23, 30, *ans.*; the Fridays of Oct., 1868.

(3) Given Mon., — 5, 1811, to find the possible months. In the 1811 column, opposite Mon. is B. Opposite 5, B gives Aug., the only common-year month available, *ans.*

(4) Given Sat., Feb. 29, —, to find the possible years. Under Feb., leap-year, opposite 29, is F. Opposite Sat. F gives leap-years 1812, 1840 1868, 1896, etc., *ans.*

NOTE: In leap-years (those shown in italics), use the Jan. and Feb. in italics, but do not use these for common years. The years 1800 and 1900 were not leap-years; 2000 will be a leap-year.

## Morning and Evening Stars and Planets (contd.)

## JUPITER

Morning star, Jan. 1 to Jan. 15  
 Evening star, Jan. 15 to Aug. 4  
 Morning star, Aug. 4 to Dec. 31

## SATURN

Morning star, Jan. 1 to May 9  
 Evening star, May 9 to Nov. 16  
 Morning star, Nov. 16 to Dec. 31

Mercury may be visible over the western horizon after sunset for a week or more before and after each eastern elongation, and similarly over the eastern horizon before sunrise before and after western elongations. At the Jan. and Mar. elongations Mercury is in eastern Capricornus; at the May and July elongations, in eastern Taurus; at the Sept. elongation, in Virgo, west of Spica; in Oct., northwest of Spica.

Venus is at greatest elongation west on Jan. 25; it is then visible in southern Ophiuchus and rises considerably before the sun, with stellar mag. -4.1. It is in eastern Sagittarius on Mar. 1; in Aquarius on Apr. 1; in southeastern Pisces on May 15; in Aries on June 1; a few degrees north of Aldebaran around June 21. It is close to the sun in apparent position in July and Aug. It becomes more and more favorable in visibility as an evening object after sunset in Oct. Venus is in Virgo, east of Spica, on Oct. 15; it is just north of Antares

around Nov. 12, and in Sagittarius in Dec.

Mars is in Pisces in Jan. and Feb.; in Aries in Mar.; in Taurus north of Aldebaran in late Apr.; in Gemini in June; in Cancer in July. In Aug. it is near the sun, but in Sept. it becomes visible in Leo, rising before the sun. In Oct. and Nov. it is in Virgo, and in Dec. it is in Virgo and Libra. This year Mars is far from the earth (249,000,000 mi. distant in mid-Aug.), whereas in 1956 it makes a close approach of about 35,000,000 mi.

Jupiter is in Gemini, south of Castor

1954 JANUARY														FEBRUARY														MARCH														APRIL																																	
S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31																
24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31						
MAY														JUNE														JULY														AUGUST																																	
S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31															
24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31						
SEPTEMBER														OCTOBER														NOVEMBER														DECEMBER																																	
S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31																		
24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31						
1955 JANUARY														FEBRUARY														MARCH														APRIL																																	
S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31															
24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31						
MAY														JUNE														JULY														AUGUST																																	
S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31														
24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31						
SEPTEMBER														OCTOBER														NOVEMBER														DECEMBER																																	
S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31																	
24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31						
1956 JANUARY														FEBRUARY														MARCH														APRIL																																	
S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31														
24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31						
MAY														JUNE														JULY														AUGUST																																	
S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31																			
24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31						
SEPTEMBER														OCTOBER														NOVEMBER														DECEMBER																																	
S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	S	M	T	W	T	F	S	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31															
24	25	26	27	28	29	3																																																																					

and Pollux, from Jan. to May. In June and July it is in Cancer, setting after the sun. In Sept. it can be seen in the morning sky in Leo, and in Nov. it passes very close to (and north of) Regulus. It is brightest in Jan., at mag. -2.2.

*Saturn* remains in the constellation *Libra* during the year. It is visible until Nov., and again (in the east) in Dec. It is a yellow-green planet, brightest in May (mag. +0.3), and in a telescope the northern surface of the planet's rings is visible.

*Uranus* is in *Gemini* and *Cancer*, and

observable with binoculars in the evening until July and then again in the morning sky beginning in late Aug. Until July its general position is about 8° southeast of *Pollux* (directly south on Apr. 1). In the autumn it is about 12° southeast of *Pollux*, and directly west of *M 44*, the Beehive star cluster. *Neptune* is a morning telescopic object until Apr. 17, then an evening planet until Oct., and a morning object in Nov. and Dec. It is in *Virgo*, averaging about 5° east and a little north of *Spica*. *Pluto* is in the eastern part of the sickle of *Leo*.

### The Sun

There are countless millions of far distant, superheated, self-luminous gaseous bodies called stars and each one is in itself a sun. Our Sun—the star around which our whole solar system revolves—is at a mean distance of 93,003,000 miles from the Earth, has a diameter of 865,390 miles, a

surface temperature of about 11,000° F. and an interior temperature estimated at millions of degrees. It has a surface area approximately 12,000 times that of the Earth and in volume or bulk it is about 1,306,000 times the size of the Earth. It is a star of average size and temperature.

### The Brightest Stars

Star	Constellation	Position, 1950		Mag.	Dist.	On
		R.A.	Dec.			meridian
		h	m	°	'	9 p.m.
Sirius.....	Canis Major.....	6	42.9	-16	39	Feb. 16
Canopus.....	Carina.....	6	22.8	-52	40	Feb. 11
Alpha Centauri.....	Centaurus.....	14	36.2	-60	38	June 16
Vega.....	Lyra.....	18	35.2	+38	44	Aug. 15
Capella.....	Auriga.....	5	13.0	+45	57	Jan. 24
Arcturus.....	Boötes.....	14	13.4	+19	27	June 10
Rigel.....	Orion.....	5	12.1	-8	15	Jan. 24
Procyon.....	Canis Minor.....	7	36.7	+5	21	Mar. 2
Achernar.....	Eridanus.....	1	35.9	-57	29	Nov. 30
Beta Centauri.....	Centaurus.....	14	0.3	-60	8	June 7
Altair.....	Aquila.....	19	48.3	+8	44	Sept. 3
Betelgeuse.....	Orion.....	5	52.5	+7	24	Feb. 3
Aldebaran.....	Taurus.....	4	33.0	+16	25	Jan. 14
Spica.....	Virgo.....	13	22.6	-10	54	May 28
Pollux.....	Gemini.....	7	42.3	+28	9	Mar. 3
Antares.....	Scorpius.....	16	26.3	-26	19	July 14
Fomalhaut.....	Piscis Austrinus.....	22	54.9	-29	53	Oct. 20
Deneb.....	Cygnus.....	20	39.7	+45	6	Sept. 16
Regulus.....	Leo.....	10	5.7	+12	13	Apr. 9
Beta Crucis.....	Crux.....	12	44.8	-59	25	May 18
Eta Carinae.....	Carina.....	10	43.1	-59	25	Apr. 17
Alpha-one Crucis.....	Crux.....	12	23.8	-62	49	May 13
Castor.....	Gemini.....	7	31.4	+32	0	Feb. 28
Gamma Crucis.....	Crux.....	12	28.4	-56	50	May 15
Epsilon Canis Majoris.....	Canis Major.....	6	56.7	-28	54	Feb. 19
Epsilon Ursae Majoris.....	Ursa Major.....	12	51.8	+56	14	May 20
Bellatrix.....	Orion.....	5	22.4	+6	18	Jan. 27
Lambda Scorpii.....	Scorpius.....	17	30.2	-37	4	July 30
Epsilon Carinae.....	Carina.....	8	21.5	-59	21	Mar. 13
Mira.....	Cetus.....	2	16.8	-3	12	Dec. 11
Epsilon Orionis.....	Orion.....	5	33.7	-1	14	Jan. 29
Beta Tauri.....	Taurus.....	5	23.1	+28	34	Jan. 27
Beta Carinae.....	Carina.....	9	12.7	-69	31	Mar. 26
Alpha Trianguli Australis.....	Triangulum Australe.....	16	43.4	-68	56	July 18
Alpha Persel.....	Perseus.....	3	20.7	+49	41	Dec. 27
Eta Ursae Majoris.....	Ursa Major.....	13	45.6	+49	34	June 3
Gamma Geminorum.....	Gemini.....	6	34.8	+16	27	Feb. 14
Epsilon Sagittarii.....	Sagittarius.....	18	20.9	-34	25	Aug. 12
Alpha Ursae Majoris.....	Ursa Major.....	11	0.7	+62	1	Apr. 22
Delta Canis Majoris.....	Canis Major.....	7	6.4	-26	19	Feb. 22



## Symbols

☉ the sun	♃ Jupiter	☾ occultation
☾ the moon	♄ Saturn	♌ opposition
☿ Mercury	♅ Uranus	● new moon
♀ Venus	♆ Neptune	☾ first quarter
♁ the earth	♇ Pluto	☉ full moon
♂ Mars	♊ conjunction	☾ last quarter

## The Zodiac and Average Date of Sun Entering

	Sign	Constel- lation	Sign	Constel- lation
Aries	Mar. 21	Apr. 18	Libra	Sept. 23
Taurus	Apr. 20	May 14	Scorpius	Oct. 23
Gemini	May 21	June 21	[Ophiuchus]	Nov. 23
Cancer	June 21	July 20	Sagittarius	Nov. 22
Leo	July 23	Aug. 10	Capricornus	Dec. 22
Virgo	Aug. 23	Sept. 16	Aquarius	Jan. 20
	Pisces	Feb. 19	Mar. 11	Feb. 16

The Sun rotates on its axis and, by observation of Sun-spots (great whirling storms in the Sun's atmosphere) and Faculae (bright streaks or areas on the Sun's surface), astronomers have discovered that the rotational speed varies from approximately 24½ days at its equator to approximately 34 days near its poles. The Sun is just one star of the great Milky Way Galaxy that is rotating on its galactic axis at a rate that gives the Sun a galactic traveling speed of 175 miles per second. Furthermore, the Sun is moving toward a point known as "the apex of the Sun's way" in the constellation Hercules at a speed of about 12 miles per second.

What we see when we look at the Sun is the glowing surface called the Photosphere. Extending above this surface is the Sun's atmosphere consisting of two layers, one extending outward for a few hundred miles from the Sun's surface and called the Reversing Layer for spectroscopic reasons, the other an outer layer extending several thousand miles and called the Chromosphere because of its reddish color due mostly to superheated hydrogen, helium and calcium. Solar "prominences" oc-

asionally burst out from this layer and extend hundreds of thousands of miles above the Sun's surface. Beyond these layers of solar atmosphere and extending to great height is the outermost observable solar feature, the magnificent Corona of exceedingly slight density that provides an awesome spectacle for observers during total eclipses of the Sun.

## Comets

In ancient times comets were supposed to be omens of sudden death, war, revolution or other dire events in human affairs and practically nothing was known of their true nature. They still offer puzzling problems to modern astronomers and, with about 1000 listed, new ones are being discovered and charted each year. In general, comets consist of a nucleus (sometimes lacking) surrounded by a head or "coma" (from the Greek word for hair because of its hazy appearance) from which extends the great tail that makes the passage of a comet through our skies such a striking spectacle. Comets come in varying sizes but the average diameter of the heads of a large number of observed comets is about 80,000 miles and the tail length may stretch out to more than 100,000,000 miles. The density of comets is so low, however, that we can see the stars through them and there is more actual material in one cubic inch of ordinary air than in 2000 cubic miles of the tail of a comet.

The luminous tails of comets were believed, for many centuries, to be merely clouds high in our atmosphere. Tycho Brahe, eccentric Danish astronomer, proved that the comet he observed in 1577 was a celestial object far beyond the limit of the Earth's atmosphere. But the great forward step in the study of comets came when Edmund Halley, who became England's Astronomer Royal, carefully observed a comet in 1682, checked with previous observations, calculated its orbit and predicted its return to our skies in 1758 or 1759. Halley died in 1742 but the comet, now named after him, reappeared on schedule and a search through ancient records indicated that it had been observed in repeated appearances as far back as 240

## 20 Famous Comets

Year and no.	Name of comet	Period
		years
1744	De Chéseaux's Comet.....	.....
1806	Biela's Comet.....	6.7
1811 I	Great Comet of 1811.....	3000
1812	Di Vico's Comet.....	70.7
1815	Olbers' Comet.....	74.0
1819 I	Encke's Comet.....	3.3
1819	Pons-Winnecke Comet.....	6.0
1835 III	Halley's Comet.....	76.3
1843 I	Great Comet of 1843.....	512.4
1844 II	Great Comet of 1844.....	102,050
1858 VI	Donati's Comet.....	2,040 (†)
1864 II	Great Comet of 1864.....	2,800,000
1871 III	Tuttle's Comet.....	13.8
1874 III	Coggia's Comet.....	6,000 (†)
1879	Brorsen's Comet.....	5.6
1881 II	Tebbutt's Comet.....	.....
1889 VI	Swift's 2nd Comet.....	7.0
1903 III	Holmes' Comet.....	6.9
1923	d'Arrest's Comet.....	6.6
1925 II	Comet Schwassmann-Wachmann.....	16.2

B.C. Its last appearance was marked by its perihelion passage in 1910 and its next visit to our skies will occur in 1986. Halley's fulfilled prediction was the first definite proof that comets have regular orbits and time schedules or are, as the astronomers say, "periodic". The known "periods" (time intervals between appearances) of comets vary from the 3.3 years of Encke's Comet to thousands of years for wider travelers. No known great comets are scheduled for appearance in our sky this year.

### The Polar Auroras

It has been definitely established that Sun-spots are the direct cause of the greatest electrical show on Earth, a double feature, the Aurora Borealis (Northern Lights) and the Aurora Australis (Southern Lights). Sun-spots are magnetic storms of vast dimensions on the surface of the Sun and they shoot out electrified particles into space. Those that come toward the Earth are drawn toward the Earth's magnetic poles and consequently these magnetic poles are the radiating centers of those spectacular electromagnetic displays in the sky that we commonly call the "Northern Lights" or the "Southern Lights", depending upon whether we see them in the northern or southern hemisphere. The electrical particles from the Sun-spots strike the upper regions of our atmosphere where the component gases (nitrogen, oxygen and extremely minor amounts of argon, helium, neon, hydrogen and carbon dioxide) are very much rarefied and cause them to vibrate and glow in colors characteristic of the various elements, just as a neon sign glows when an electric charge is passed through it. The Sun-spots that cause auroral displays also cause the magnetic storms that interfere

A curious thing about comets is that their tails always trail from the head in a direction away from the Sun, so that when a comet is moving away from the Sun, the tail stretches out in front of the head. A comet's tail is so tenuous as to be almost a vacuum. The Earth passed through the tail of Halley's Comet in May, 1910, and on that occasion astronomers heard nothing, felt nothing and saw nothing to indicate that such passage had any observable effect on the Earth.

with radio reception, telephone, telegraph and cable traffic and other electromagnetic devices such as compasses and various aviation accessories.

There is an almost infinite variety to the auroral display. The lights may sweep across the sky in waves, in streamers or in folds like draped curtains. Or it may be a stationary glow. Sometimes there is little or no color in these waves, sheets or streamers of light. At other times the lights may be rich in red or green or pastel shades. Rose color and lavender and violet and purple are common. Blue is rare but has been seen. The "Northern Lights" have been seen as far south as New Orleans and the Florida peninsula and the "Southern Lights" have been seen as far north as New Zealand and Australia, but the maximum occurrence of these auroral displays is along the borders of the Arctic and Antarctic regions. Since these are atmospheric displays, our atmosphere must extend to the extreme height at which auroral lights are observed. Prof. Carl Störmer of the University of Oslo found this to be about 600 miles. He further found that no auroral lights came closer to the Earth's surface than 50 or 60 miles.

### The Change of Seasons

It is enough to state that the earth is nearer to the sun in January than it is in July to convince those who live in the northern hemisphere that there must be some other explanation than that for the seasonal changes on our globe. The reason for the change in seasons is that the axis of rotation of the earth is inclined to the perpendicular of the plane of its orbit around the sun at an angle of approximately  $23\frac{1}{2}^\circ$ , so there is a proportional shifting of the angle of the sun's rays falling on different portions of the earth's surface at different times of the year.

On or about June 21, the north end of the earth's axis is inclined to its limit toward the sun. In the northern hemisphere this is our summer solstice. We then have our longest daylight period and a maximum of heat and light from the sun, whose perpendicular rays are falling

on the Tropic of Cancer,  $23\frac{1}{2}^\circ$  north of the equator. Six months later, on or about Dec. 22, the earth has reached a position in its orbit that finds the north end of its axis inclined at its maximum away from the sun. This is our winter solstice. We then have our shortest daylight period and a minimum of heat and light from the sun, which is over the Tropic of Capricorn,  $23\frac{1}{2}^\circ$  south of the equator. Conditions are reversed in the southern hemisphere for obvious reasons. Their winter is our summer; their summer is our winter. Twice a year, at the equinoxes in March and September, the sun is on the equator, the day is of equal length all over the world and each hemisphere receives the same amount of light and heat from the rays of the sun.

If the effect in the change of the angle of the sun's rays on the earth's surface

were instantaneous, our coldest period would be at the winter solstice and our warmest period at the summer solstice, but because of the blanket of atmosphere around the earth and the cumulative effect

in the heating or cooling of the earth's surface, we have "the lag of the seasons," which brings our warmest and coldest periods some 5 or 6 weeks after the sun is "farthest north" or "farthest south."

## Seasons for the Northern Hemisphere, 1955

Eastern Standard Time

March 21, 4:36 A.M. Sun enters sign of Aries; spring begins  
 June 21, 11:32 P.M. Sun enters sign of Cancer; summer begins  
 Sept. 23, 2:42 P.M. Sun enters sign of Libra; autumn begins  
 Dec. 22, 10:12 A.M. Sun enters sign of Capricornus; winter begins

Planet Table

	Mean distance from sun in millions of miles	Period of revolution around the sun	Eccentricity of orbit	Inclination to ecliptic	Diameter	Period of rotation on axis	Inclination of equator to orbit plane	Surface gravity (earth = 1)	Oblateness	Mean velocity in orbit	Max. stellar mag.
				° ' "	miles		°			mi./sec.	
Sun.....					865,390	24 <sup>d</sup> 64 <sup>h</sup> †	7.2	28	0		-26.7
Moon.....		(27 <sup>d</sup> 32 <sup>h</sup> 22 <sup>m</sup> )*	0.05	5 8	2,159.9	27 <sup>d</sup> 32 <sup>h</sup> 22 <sup>m</sup>	6.7	0.16	0	0.63	-12.6
Mercury....	36.00	87 <sup>d</sup> 969	0.21	7 0	3,008.5	88 <sup>d</sup>	7	0.28	0	30	-1.2
Venus.....	67.27	224 <sup>d</sup> 701	0.01	3 24	7,575.4	† †	?	0.85	0	22	-4.4
Earth.....	93.00	365 <sup>d</sup> 256	0.02	0 0	7,926.7§	23 <sup>h</sup> 56 <sup>m</sup>	23.4	1.00	1/297	18.5	.....
Mars.....	141.71	1 <sup>y</sup> 881	0.09	1 51	4,215.6	24 <sup>h</sup> 37 <sup>m</sup>	25.2	0.38	1/192	15	-2.8
Jupiter....	483.88	11 <sup>y</sup> 862	0.05	1 18	88,698§	9 <sup>h</sup> 50 <sup>m</sup> †	3.1	2.6	1/15	8	-2.5
Saturn.....	887.14	29 <sup>y</sup> 458	0.06	2 29	75,060§	10 <sup>h</sup> 14 <sup>m</sup> †	26.8	1.1	1/9.5	6	-0.4
Uranus.....	1783.98	84 <sup>y</sup> 013	0.05	0 46	30,878	10 <sup>h</sup> 4 <sup>m</sup> †	98	0.9	1/14	4	+5.7
Neptune....	2795.45	164 <sup>y</sup> 793	0.01	1 46	27,700	15 <sup>h</sup> 8	29	1.1	1/40	3	+7.8
Pluto.....	3675.27	248 <sup>y</sup> 430	0.25	17 9	3,600	11	11	11	11	<3	+14

\* Period of revolution around the earth. † This is the rotation at the equator. ‡ Rotation of Venus is uncertain but is probably a few weeks. § The equatorial diameters of the earth, Jupiter, and Saturn are given; polar diameters are: earth, 7900.0 mi., Jupiter 82,789 mi., Saturn 67,170 mi.

SATELLITES. The number of known moons in the solar system is now as follows: for the earth 1; Mars 2; Jupiter 12; Saturn 9; Uranus 5; Neptune 2.

OTHER DATA ON THE EARTH: Equatorial circumference, 24,902.4 mi.; total area, 196,949,970 sq. mi., mass, 6.6 sextillion tons.

## The Moon

Mars has 2 small satellites or moons, Jupiter has 12, Saturn 9, Uranus 5, and Neptune 2; but the earth has one comparatively large satellite, commonly called the moon. It is a globe 2,160 mi. in diameter with a surface deeply pitted by great craters. It has no atmosphere that astronomers can detect and shines only by reflected light of the sun. Though it seems very bright to us at "full moon," it reflects only about 7% of the light falling on it from the sun.

The orbit of the moon is elliptical, with the earth at one focus. The distance of the moon from the earth varies from 221,463 mi. (perigee) to 252,710 mi. (apogee), the average being 238,857 mi. The curious thing about the moon is that it revolves around the earth in 27 days, 7 hr., 43 min., 11.47 sec., and rotates on its axis in exactly the same time, which is why we always see the same side of the moon. Because of what are

known as "librations in latitude and longitude" and also a "diurnal libration," we do see "around the edge of the moon" at different times. In this manner a total of 59% of the moon's surface has been observed, but the other 41% never has been seen by the human eye.

Although the moon revolves around the earth in approximately 27½ days, it is, on the average, a matter of 29½ days (29 days, 12 hr., 44 min., 2.78 sec.) from one new moon to the other, because the earth is moving around the sun while the moon is moving around the earth and the "new moon" depends upon the relative positions of the 3 bodies.

If the planes of orbit of the earth and the moon coincided, there would be an eclipse of the moon at every "full moon" and an eclipse of the sun at every "new moon," but the 5° angle between the



planes of orbit of the earth and the moon causes the moon on most of its revolutions to miss the earth's shadow and the moon's shadow on most trips to miss falling onto the earth.

The tidal effects of the moon are well known. The "spring tides" occur at the "full moon" and "new moon" and the "neap tides" at first quarter and last quarter.

## Eclipses in 1955

1. *Total eclipse of the sun*, June 20 (for Asia time-zones). The path of totality begins at sunrise in the Indian Ocean, east of Africa, crosses Ceylon, Burma, Thailand, French Indo-China, the Philippine Islands (at Manila and Legaspi) and ends at sunset in the Pacific Ocean, west of the Society Islands. This eclipse is of very long duration of totality, being 7<sup>m</sup>8<sup>s</sup> in the South China Sea, between French Indo-China and Luzon.

2. *Partial eclipse of the moon*, Nov. 29. Visible generally in the Arctic regions, Europe, Africa, Asia, the Indian Ocean, Australia, and extreme northern Canada.

3. *Annular eclipse of the sun*, Dec. 14. Visible in northeastern Africa (Khartoum and Djibouti), the north Indian Ocean, Burma, Thailand, French Indo-China and Formosa. The duration of the annular phase is about 9½<sup>m</sup> at the coast of Africa, and over 12<sup>m</sup> in the Indian Ocean, southwest of Ceylon.

## Astronomical Constants

1 light-year	5,880,000,000,000 mi.
velocity of light	186,272 mi./sec.
astronomical unit or distance earth-to-sun	93,003,000 mi.
mean distance, earth to moon	238,860 mi.
general precession	50".26
obliquity of the ecliptic	23° 27' 8".26—0".4684( <i>t</i> —1900) *
equatorial radius of the earth	3963.34 statute mi.
polar radius of the earth	3949.99 statute mi.
earth's mean radius	3958.89 statute mi.
oblateness of the earth	$\frac{1}{297.0}$
equatorial horizontal parallax of the moon	57' 2".70
earth's mean velocity in orbit	18.5 mi./sec.
sidereal year	365 <sup>d</sup> .2564
tropical year	365 <sup>d</sup> .2422
sidereal month	27 <sup>d</sup> .3217
synodic month	29 <sup>d</sup> .5306
sidereal day	23 <sup>h</sup> 56 <sup>m</sup> 4".091 of mean-solar time
mean solar day	24 <sup>h</sup> 3 <sup>m</sup> 56".555 of sidereal time

\* ‡ refers to the year in question, for example 1948.

## The Atmosphere

The atmosphere of the Earth—the blanket of air that surrounds our globe and is essential to life—is of interest to astronomers because of its effect on the light that comes to us from heavenly bodies. Air has weight and volume. It refracts (bends or changes the direction of) light rays that enter it. Due to this refraction, we are able to see the Sun and the Moon before they rise and after they set. The "twinkling" of the stars is caused by convection currents in the air that have a rapidly changing refractive effect on the light from the stars. Our twilight is produced by the diffusion in the atmosphere of light from the Sun when it is below the horizon. Meteors become visible when they are heated to incandescence by friction with the atmosphere when, from outer space, they plunge into it at terrific speed.

Prof. Carl Störmer of the University of

Oslo measured the height of the atmosphere and found it to be more than 600 miles, but about half of it by weight is below 18,000 feet. Although we may remark blandly that something is "as light as air", the Earth's atmosphere in bulk is of such enormous weight that at sea level it exerts a pressure of approximately 14.7 pounds per square inch. At higher levels, of course, the pressure is less.

Chemically, the atmosphere is composed of nitrogen (approximately 78 per cent by volume), oxygen (approximately 21 per cent by volume), and extremely minor amounts (about 1 per cent in all by volume) of argon, neon, helium, hydrogen and carbon dioxide. There is also present in the air a varying amount of water vapor, which is known as humidity and is distressing when the percentage is high in warm weather.

## Important Meteor Showers

Date	Meteor stream	Radiant in constellation
Jan. 1-4	Quadrantids.....	Boötes
Feb. 5-10	Alpha Aurigids.....	Auriga
Mar. 10-12	Zeta Boötids.....	Boötes
Apr. 19-23	Lyrids.....	Hercules
May 1-6	May Aquarids.....	Aquarius
May 30	Eta Pegasids.....	Pegasus
June 27-30	Pons-Winnecke meteors.....	Draco
July 14	Alpha Cygnids.....	Cygnus
July 26-31	Delta Aquarids.....	Aquarius
Aug. 10-14	Perseids.....	Cassiopeia
Aug. 10-20	Kappa Cygnids.....	Cygnus
Aug. 21-31	Zeta Draconids.....	Draco
Sept. 22	Alpha Aurigids.....	Auriga
Oct. 2	Quadrantids.....	Boötes
Oct. 9	Giacobinids.....	Draco
Oct. 18-23	Orionids.....	Orion
Nov. 14-18	Leonids.....	Leo
Dec. 10-13	Geminids.....	Gemini

## Meteors and Meteorites

Meteorites are meteors that have come down to Earth. Meteors are masses of mineral or metal or both that plunge into the Earth's atmosphere at great speed and become incandescent from the resultant friction so that they are seen in the sky as "fireballs" (bolides) or "shooting stars". The "fireballs" are the larger, make a greater flash across the sky and sometimes explode. Meteors come in all sizes but most of them verge on the microscopic and burn up completely in the flash that makes them visible from 40 to 60 miles above the Earth's surface. Millions of them enter our atmosphere every twenty-four hours and probably not more than one or two a day survive to strike the ground as meteorites.

The largest meteorite ever found is located near Grootfontein, Southwest Africa, and its weight is estimated between 50 and 70 tons. The second largest meteorite (the Ahnighito, weight 36½ tons) was found by Adnighit Peary, Arctic explorer, at Cape York, Greenland, and is now on exhibition in the Hayden Planetarium, New York City. The largest meteorite found on United States soil is the Willamette (weight 15½ tons), which fell near Portland, Oreg., and is now in the American Museum of Natural History, New York City.

Craters produced by the fall of meteorites have been found in many countries. The first to be recognized and the largest known is Meteor Crater in Arizona, a depression about 4,000 feet in diameter, about 600 feet deep, and with exterior walls rising 150 feet above the surrounding plain. Meteor craters have been found near Odessa, Texas; Haviland, Kansas; in the Arabian Desert; in Central Australia and—a notable group of fifty or more—in the region of the Stony Tunguska River in northern Siberia.

Many meteors travel in swarms, believed in some cases to be disintegrated comets. The Perseid shower that occurs annually Aug. 10-14 is thought by some astronomers to be all that remains of Tuttle's Comet and the Leonid shower, which reaches a maximum in mid-November every 33 years, similarly is suspected of being what is left of Tempel's Comet. The Leonid shower of 1833 was the greatest meteor display of which astronomers have record.

## Projection Planetaria

Adler Planetarium, 900 E. Achsah Bond Drive, Chicago, Ill.

Director, Wagner Schlesinger.

Fels Planetarium, 20th St., Benjamin Franklin Pkwy., Philadelphia, Pa.  
Director, I. M. Levitt.

Griffith Planetarium, Los Angeles, Calif.  
Director, Dinsmore Alter.

Hayden Planetarium, 81st St., Central Park West, New York, N. Y.

General Manager, Joseph M. Chamberlain.

Buhl Planetarium, Federal and West Ohio Sts., Pittsburgh, Pa.

Director, Arthur L. Draper.

Morehead Planetarium, University of North Carolina, Chapel Hill, N. C.

Manager, A. Jenzano.

Morrison Planetarium, Golden Gate Park, San Francisco, Calif.

Manager, George W. Bunton.

Seymour Planetarium, Museum of Natural History, Springfield, Mass.

Director, Frank D. Korkosz.

## Notable Telescopes of the World

### Refractor Telescopes

Size in inches	Observatory	Location
40	Yerkes	Williams Bay, Wis.
36	Lick	Mt. Hamilton, Calif.
32.7	Paris (Univ. of)	Meudon, France
31.5	Astrophysical	Potsdam, Germany
30	Allegheny	Pittsburgh, Pa.
30	Bischoffsheim	Nice, France
30	Poulkova	Leningrad, U.S.S.R.

### Reflector Telescopes

200	Palomar	Palomar Mt., Calif.
100	Mt. Wilson	Pasadena, Calif.
82	McDonald	Mt. Locke, Texas
74	Dunlap	Richmond Hill, Ont.
72	Lord Ross (dismantled)	Parsonstown, Ireland
72	Dominion Astrophysical	Victoria, B. C.
69	Perkins	Delaware, Ohio
61	Harvard	Harvard, Mass.
60	Bloemfontein	Bloemfontein, U. of S. Af.
60	Mt. Wilson	Pasadena, Calif.
60	Córdoba	Bosque Alegre, Argentina

# THE OTHER NATIONS OF THE WORLD



A GUIDE TO MAIN HISTORICAL, POLITICAL, ECONOMIC,  
GEOGRAPHIC AND SOCIAL FACTS

*Prepared by the Staff of* ENCYCLOPAEDIA BRITANNICA

*Under the direction of*  
WALTER YUST, Editor-in-chief

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A record of later events may be found in the section: NEWS RECORD OF 1954.

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## Afghanistan (Kingdom)

Area: approx. 270,000 square miles.  
Population (est. 1953): 13,000,000 (approx. 73% Afghan, 23% Tadchik, 4% Mongolian and others).

Density per square mile: c. 48.1.

Ruler: Mohammed Zaher Shah.

Prime Minister: Mohammed Daud Khan.

Principal cities (est. 1953): Kabul, 310,000 (capital); Kandahar, 195,000 (trading center); Herat, 150,000 (farming center).

Monetary unit: Afghani.

Languages: Pushtu (official), Persian.

Religion: Mohammedan (Sunni, 90%; Shia, 10%).

**HISTORY.** Wedged between Pakistan, Iran and the U.S.S.R. in southwestern Asia without outlet to the sea, Afghanistan did not become an independent state until 1747. Previously, it had been either a cluster of small states under nominal Arab rule, part of Mongol or Mogul empires, or dismembered among India, Persia and the Uzbeks. By the 19th century it had passed into the British sphere of influence.

In 1880 Great Britain recognized Abdur Rahman Khan as Emir and gave him an annual subsidy of more than \$500,000 to delegate management of his foreign relations to Britain. His son, Habibullah, succeeded him in 1901 and kept Afghanistan neutral in World War I despite strong pressure of pro-Turkish elements.

On Aug. 8, 1919, a treaty was signed making Afghanistan free and independent of all British control. The country maintained strict neutrality in World War II, and was admitted to the United Nations in Nov., 1946. Relations with Pakistan have been strained by a dispute over areas inhabited by the Pathans in the North West Frontier Province.

**GOVERNMENT.** Under the 1932 constitution, Afghanistan is a constitutional monarchy, with authority vested in the sovereign and parliament, which has a senate of 50 members who are named for life by the sovereign and a national assembly of 171 elected members. Executive power is exercised by the sovereign and cabinet headed by the prime minister.

Military service is compulsory. The army strength is about 75,000, supplemented by tribal bands. There is a small air force.

**SOCIAL AND ECONOMIC CONDITIONS.** Education is nominally compulsory. Primary schools exist in many parts of the country, but secondary schools only in Kabul and provincial capitals. There were 100,250 pupils in 334 elementary schools in 1951. There were also 32 secondary schools and a university at Kabul.

Only a fifth of the soil is under cultivation, the greater part of the country being mountainous and rocky. Farming is confined to the fertile valleys and plains, sometimes with the aid of irrigation. Two crops a year are usually grown. Important ones include fruits and nuts, castor beans, cereals, madder, tobacco, cotton and vegetables. Wheat is the staple food. The fat-tailed indigenous sheep is the principal source of meat and wearing apparel.

Important manufactures include silk, felt, sheepskin coats, soap, carpets and boots. Factories have been erected by government monopolies to produce skins, sugar, textiles, vehicles, and power.

Among the leading exports are karakul skins (mostly to the U.S.), cotton, wool, rugs, carpets, spices and dried fruits.

Most of the trade normally is carried on



through Pakistan; wool is exported to the U.S.S.R. in return for consumers' goods. Exports in 1949-50 were placed at 717,000,-000 afghanis and imports at 779,000,000 afghanis.

Afghanistan has no railways or navigable streams. Camels and pack horses are still used by the natives, but motor transport is of increasing importance. The principal trade routes lead south through the Khyber and Khojak Passes to Pakistan, and north to the Uzbek and Turkmen Soviet Socialist Republics. There are about 6,000 miles of roads suitable for motor transport.

Both mineral and forest resources are largely unexploited. There are deposits of chromite, coal, copper, gold, iron ore, oil and silver.

**NATURAL FEATURES; CLIMATE.** Afghanistan, approximately the size of Texas, is split east to west by the Hindu Kush range of the Himalayas, rising in the east to heights of 24,000 feet. Except in the southwest, most of the country is covered by high snow-capped mountains and deep valleys. The few passes are deep and narrow. The climate ranges from extremes of below zero to more than 100° in the north; however, it is not so extreme in the south, although snowfall is heavy all over the country in winter. Rainfall, chiefly in the spring, is relatively light.

## Albania (Republic)

(Shqipëria)

Area: 10,629 square miles.

Population (est. 1952): 1,246,000 (Albanian 99.8%; others, .2%).

Density per square mile: 117.2.

Chairman of Presidium: Hadji Leshi.

Premier: Mehmet Shehu

Principal cities (est. 1949): Tirana, 40,000 (capital); Scutari, 30,000 (northern trading center); Koritsa, 28,000 (farming center).

Monetary unit: Lek.

Language: Albanian.

Religions (est.): Moslem, 69%; Orthodox Christian, 21%; Roman Catholic, 10%.

**HISTORY.** A tiny, backward state approximately the size of Maryland, Albania has acquired considerable importance since World War II because of its close ties with the Soviet Union and its strategic location at the mouth of the Adriatic. After the fall of the Roman Empire, Albania became part of the Byzantine Empire and was successively invaded by Goths, Serbs and Bulgarians. From 1014 to 1204 it was again under Byzantine rule. An alliance of Albanian chieftains (1444-66) under Skanderbeg failed to halt the advance of the Turks, and the country remained under at least nominal Turkish rule for more than four centuries, until it proclaimed its independence on Nov. 28, 1912.

During World War I Albania was variously occupied by Italian, Greek, French, Serb and Austro-Bulgarian forces. On Aug. 2, 1920, Italy recognized Albanian independence and evacuated the country. Ahmed Zogu, premier in 1922-23, ousted the government of Mgr. Fan Noli in 1924 and became president of a newly constituted republic in 1925. Three years later, after concluding pacts which placed Albania in Italy's sphere of influence, Zogu proclaimed himself King Zog 1.

In 1939, Italy occupied the country in a matter of days. During the Greco-Italian war of 1940-41, the Greek armies pushed the Italians back from the Albanian border and occupied a large part of southern Albania. When Germany attacked Greece and Yugoslavia in April, 1941, however, the Greeks withdrew quickly, and the Axis occupation of Albania was complete.

Albania was free of the Axis yoke by the end of 1944, and a leftist provisional government under Colonel General Enver Hoxha was established. That regime was confirmed in power by subsequent elections and full Soviet recognition, although provisional British and U. S. recognition was withdrawn in 1946. Since then, Albania has collaborated closely with the Soviet Union.

**GOVERNMENT.** Under its 1945 constitution, Albania has a typical soviet government. Supreme power is vested in the popularly elected national assembly, to which the cabinet, headed by the premier, is responsible. The army, estimated at 60,000 men, has liaison with the U.S.S.R.

**SOCIAL AND ECONOMIC CONDITIONS.** Primary education is nominally compulsory, but illiteracy is high, especially among women. There is a teachers' college at Tirana.

Albania is still a primitive country where each family tries to provide most of its own needs. Nearly the whole population is engaged in combined farming and stock-raising. Only a small portion of the central part is fit for tilling. Corn is the chief crop. Others are wheat, tobacco, oats, barley, rye, spelt, olives and citrus fruit. Only a few factories are engaged in processing Albania's agricultural products.

Albania's postwar trade has been limited for the most part to the Soviet bloc. Important exports include crude oil, copper and chrome ore.

Railway mileage totaled only about 81 in 1951, linking Durazzo with Tirana and Elbasan. Good highways were developed by the Italians for strategic purposes, and the Russians continued such construction. The only fully equipped port is Durazzo.

The 1953 budget estimated revenue at 11,350,000,000 leks and expenditure at 11,-250,000,000 leks.

Mineral wealth, thought to be considerable, is relatively unexploited. The principal minerals are aluminum and petroleum, which were developed to some extent during the Italian occupation of 1939-44. There are also deposits of lignite, bitumen, chromite, copper, asphalt, gypsum and iron.

**NATURAL FEATURES; CLIMATE.** Albania is a mountainous state, largely over 3,000 ft. above sea level, with a narrow marshy coastal plain crossed by several rivers. The interior mountain plateaus and basins contain the centers of population.

The climate is typically Mediterranean, with dry, hot summers and moderate winters. Inland temperatures are lower than those on the coast.

## Arabia

The Arabian peninsula is at the southwestern extremity of Asia. Its rich oil deposits and proximity to Palestine gave it special importance after World War II. Once a political unit, today it consists of the kingdoms of Saudi Arabia and Yemen, the British colony of Aden and six British protectorates.

The peninsula, with an area more than three times that of Texas, and an extreme length of 1,400 miles, is generally a plateau sloping gently eastward from a mountain range that averages 5,000 feet in elevation and runs along its entire west side within ten or fifteen miles of the Red Sea. The range reaches a maximum of 12,336 feet in Yemen to the southwest. Arabia has no rivers and no forests and is principally a desert dotted with many oases.

Most of the peninsula, particularly the interior, has a hot desert climate with frequent changes in temperature. The highlands of the Yemen and southwestern Saudi Arabia, however, together with parts of Oman, have a temperate climate. Jidda, on the Red Sea, has an average daily high temperature of 93° during August. Rainfall is almost nonexistent, amounting at Aden to less than two inches annually.

Mohammed united all Arabs in the 7th century A.D., and his followers, led by the caliphs, founded a great empire with its capital at Medina. Later, the caliphate capital was transferred to Damascus and then Baghdad, but Arabia retained its importance because of the holy cities of Mecca and Medina. In the 16th and 17th centuries, the Turks established at least nominal rule over much of Arabia, and in the middle of the 18th century it was divided into separate principalities.

Through agreements with local rulers, the British extended their rule over the southern and eastern coasts in the 19th century. At the same time, the Wahhabis, a religious sect advocating strict adherence

to Mohammed's teachings, gained control over most of central and eastern Arabia, and their work was the beginning of the present Saudi Arabia.

### POLITICAL DIVISIONS OF ARABIA

Name	Area (sq. mi.)	Population (est. 1952)
Aden colony (British)	108	100,000
Aden protectorate*	112,000	800,000
Bahrein Islands		
(Sultanate)*	213	112,000
Kuwait (Sheikdom)*	9,000	150,000
Oman and Masqat		
(Sultanate)*	65,000	550,000
Qatar (Sheikdom)*	4,000	17,000
Saudi Arabia		
(Kingdom)	597,000	6,000,000
Trucial Coast (Sheikdoms)*	16,000	76,000
Yemen (Kingdom)	31,000	4,500,000†

\* British protectorate. † Official estimate, 1953.

**Aden and Bahrein Islands.** See British Commonwealth: Asia

### Kuwait (Sheikdom)

Kuwait, on the northwestern shore of the Persian Gulf, is an independent state ruled by Sheik Abdullah as-Salim as-Subah. British protection, first exercised in 1898, has several times prevented it from being absorbed by Saudi Arabia. The territory surrounding Al Kuwait, its port, is largely desert; its trade consists of exchanging Arab goods from the interior for textiles, rice, sugar and other necessities. Kuwait's petroleum reserves, estimated at 9 billion barrels, are under concession to the Kuwait Oil Co. Ltd. (owned jointly by Gulf Oil Corp. and Anglo-Iranian Oil Co.), which pays one-half its profits to the Sheik. Production, which began only in 1945, totaled 314,592,486 barrels in 1953. Production is concentrated at the Burgan field, from which petroleum is piped to the new port of Ahmadi for shipment.

South of Kuwait on the Persian Gulf is the Saudi Arabian-Kuwait neutral zone, which under the Treaty of Uqair (1922) belongs in undivided one-half interest to Kuwait and Saudi Arabia. It consists of about 2,000 sq. mi. of uninhabited desert. Oil was discovered in 1953 by American Independent Oil Co. The first export shipments were made early in 1954.

### Oman and Masqat (Sultanate)

Occupying the mountainous southeastern part of the peninsula, Oman is nominally an independent state under the rule of Sultan Sayyid Sa'id bin Talmur. It has been under British protection since the 19th century. The state is best known for its date cultivation, and its riding camels are considered the best in the world. Trade is mainly to and from India. The capital is Masqat (population 4,200).



### **Qatar (Sheikdom)**

Qatar occupies the whole of the Qatar peninsula in the Persian Gulf. It is ruled, under British protection, by Sheik Abdullah Ibn Jasim eth Thani. The whole area is claimed by Saudi Arabia. Oil deposits are being exploited by a subsidiary of the Iraq Petroleum Co.; output in 1953 was 3,997,-926 long tons (about 30,000,000 barrels).

**Saudi Arabia.** See Saudi Arabia.

### **Trucial Coast (Sheikdoms)**

This area, extending along part of the Gulf of Oman and the southern coast of the Persian Gulf, is ruled by 7 semi-independent sheiks. Treaties signed with Britain in 1853 and 1892 provided that the sheiks should not cede or sell any part of their land to any other power.

**Yemen.** See Yemen.

## **Argentina (Republic)**

### **(República Argentina)**

**Area:** 1,079,965 square miles.

**Population** (est. 1953): 18,379,000 (approximately 97% of European descent, chiefly Spanish and Italian; 3% Indian and other).

**Density per square mile:** 17.0.

**President:** Juan D. Perón.

**Principal cities** (est. 1950): Buenos Aires, 3,371,000 (capital and chief port); (census 1947) Rosario, 464,688 (flour milling); Córdoba, 351,644 (northwest farming center); Avellaneda, 279,572 (industrial suburb of Buenos Aires); Eva Perón (formerly La Plata), 271,738 (seaport, meat packing); Lanús, 242,760 (suburb of Buenos Aires).

**Monetary unit:** Peso.

**Languages:** Spanish (official), Italian.

**Religion:** Roman Catholic (state-superfected).

**HISTORY.** Discovered in 1516 by Juan Díaz de Solís, Argentina developed slowly under Spanish colonial rule. Buenos Aires was settled permanently in 1580 and became a prosperous city; the cattle industry of the Argentine pampas was thriving as early as 1600.

Invading British forces were expelled in 1806-07, and when Napoleon conquered Spain, the Argentinians set up their own government in the name of the Spanish king in 1810. On July 9, 1816, independence was formally declared. Internal dissension, particularly between Buenos Aires and the provinces, was put down under the dictator Juan Manuel de Rosas, who brought about unification from 1829 to 1852. Rosas was overthrown by Justo José de Urquiza, who became the first president under the 1853 constitution, modeled after that of the U. S.

President Hipólito Irigoyen (1916-22) refused to abandon Argentinian neutrality

in World War I. Re-elected in 1928, Irigoyen, a radical, was ousted two years later by a conservative revolution led by General José Uriburu. The latter's successor, General Agustín Justo (1932-38) followed a moderate policy and undertook a large public works program.

Argentina proclaimed neutrality at the outbreak of World War II, but in general co-operated in hemispheric defense programs. In the closing months of the war, the nation declared war on the Axis (March 27, 1945) and signed the Act of Chapultepec the following April 4. Diplomatic recognition and admission to the U. N. followed. Juan D. Perón, then an army colonel, emerged as strongman and won the 1946 presidential elections. Congress became completely controlled by Perón supporters. Perón was re-elected Nov. 11, 1951, in an election in which the opposition was denied freedom of speech, press and assembly.

**GOVERNMENT; DEFENSE.** Argentina is a federal union of sixteen provinces and eight territories. Under the new constitution promulgated in 1949, a president and vice president are elected every six years by direct popular vote. The president appoints his cabinet. The vice president presides over the Senate but has no other powers. Both executives are eligible for re-election. The National Congress has two houses—a 30-member Senate which is popularly elected for six-year terms, and a Chamber of Deputies (one for each 100,000 electors) popularly elected for six years, one-half the membership of each house being renewed every three years.

Each province has its own constitution, elected governor, legislature and judiciary, but the president may in a crisis take over the local government.

Under legislation enacted Nov. 29, 1946, all men and women 12 to 50 are subject to military service at the president's discretion. Service from 20 to 22 is compulsory. Active peacetime strength of the army is 50,000 officers and men.

The air force has about 150 combat planes. The navy in 1953 included two modernized battleships, five light cruisers and 15 fleet destroyers.

**SOCIAL AND ECONOMIC CONDITION.** *Education.* Argentina's estimated illiteracy rate of 7-10 per cent is the lowest in all Latin America. Education is free, secular and compulsory between six and fourteen. In 1951 there were 15,874 primary schools with 2,446,138 pupils, 3,264 public and private secondary, normal and special schools with 521,132 students and 6 national universities with 90,201 students.

*Agriculture.* A farming and stock-raising nation, Argentina devotes some 41 per cent of its area to pasture and 11 per cent to cultivation. Cotton, sugar cane and fruits are important, and Argentina is the



world's largest producer of yerba maté (Paraguay tea), the national beverage. The 1953 wine production was about 247,300,-000 gallons.

Estimated crop production for 1953, in metric tons, was as follows: wheat, 7,800,-000; oats, 1,106,000; barley, 1,194,000; maize, 3,620,000; linseed, 571,000; sunflower seed, 528,000; cotton, 600,000 bales (480 lb. each).

Cattle raising predominates on the pampas, especially in Buenos Aires province. Sheep raising is more important in Patagonia. In 1952 there were 45,262,995 cattle, 54,683,731 sheep, 3,989,188 pigs, (1947) 7,237,663 horses. Wool production in 1953 was 407,000,000 lb., greasy basis.

**Manufacturing.** Industrial expansion was accelerated during World War II by the shortage of imports, but industry is still closely allied to agriculture. The principal industry is meat refrigeration, followed by flour milling, textiles, sugar refining, dairy products, quebracho extraction and wine. The number of industrial workers was 944,800 in June 1951.

**Trade.** Argentina's trade position, favorable in the immediate postwar period, deteriorated as dollar exchange became scarcer. Trade statistics are as follows (in millions of pesos):

	1951	1952	1953
Exports	6,709.2	4,392.0	7,107.0
Imports	10,491.9	8,361.2	5,655.0

Leading exports in 1953 were cereals and linseed (26%), meat (18%), wool (16%) and forest products (6%). Imports included machinery and vehicles (26%), fuel (17%) and foodstuffs (9%). Exports in 1952 went principally to the U. S. (26%), Britain (14%) and France (8%). Principal suppliers were the U. S. (18%), Brazil (11%) and Germany (8%).

**Communications.** According to *Lloyd's Register*, the merchant fleet on June 30, 1953, was composed of 370 steamers and motorships (100 tons and over) aggregating 1,071,272 gross tons. Chief Argentine ports are Buenos Aires, second only to New York in the western hemisphere, and Eva Perón (La Plata), both on the Plata estuary; and Rosario, a port on the Paraná River.

Railway mileage is about 27,000, nearly all of which radiates outward from Buenos Aires. With the purchase in 1947-48 of the British- and French-owned railways, the system became government-owned. Highway mileage is upwards of 300,000, largely unimproved. Telephones in Jan. 1952 totaled 852,327; broadcasting stations (1951) 58; radio sets, 2,200,000. The air transportation system is government-owned; domestic air routes extend as far south as Tierra del Fuego. Direct international connections with the rest of the world are maintained by numerous international airlines.

**FINANCE.** Ordinary receipts and expenditures of the national administration are as follows (in millions of pesos):

	1952	1953*	1954*
Revenue	9,436.6†	8,354.5	8,354.5
Expenditure	9,364.5	8,321.1	8,321.1

\* Budget estimate. † Including proceeds of loans.

Budget estimates excluded expenditures for public works (1,110,000,000 pesos in 1954), to be covered by borrowing, and two self-balancing accounts—autonomous institutions (3,657,600,000 pesos) and special accounts (2,703,000,000 pesos). The net national debt on Dec. 31, 1951, was 21,762,-900,000 pesos.

**NATURAL FEATURES AND RESOURCES.** Second in South America to Brazil in size and population, Argentina is about 2,070 miles long and 860 miles wide at the maximum. In general, it is a plain, rising from the Atlantic to the Chilean border and the towering Andes peaks, including Aconcagua, 22,835 feet, the highest peak in the world outside Asia. The northern area of the Argentine plain is the swampy and partly wooded Gran Chaco. South of that to the Río Negro are the rolling, fertile pampas, rich for agriculture and grazing, and supporting most of Argentina's population. Next southward is Patagonia, a region of cool, arid steppes with some wooded and fertile sections. The eastern part of Tierra del Fuego, the island southern tip of South America, belongs to Argentina.

The three great rivers which make up the Plata system—the Paraná, Paraguay and Uruguay—are important commercial arteries in northern Argentina. Rosario and Santa Fé, 260 and 360 miles respectively above Buenos Aires on the Paraná, are accessible to ocean vessels.

**Minerals.** Argentina must import most of nearly every mineral it uses. Oil is produced in Patagonia (1953: 28,000,000 barrels), and there is small mining of tungsten, lead, gold, zinc, tin, silver and beryllium. The government announced discovery of uranium deposits in Feb., 1947. Coal imports in 1952 amounted to 1,740,288 metric tons.

**Forests.** The Gran Chaco area is the world's chief source of quebracho extract. Total exports of this tanning agent obtained from quebracho logs in 1951 were 258,000 metric tons, part of which was re-exported from Paraguay. Other forest products—hardwoods, dyewoods, lignum vitae, red quebracho, medicinal gums and other tannins—are consumed locally for the most part.

**CLIMATE.** Except for the northern Gran Chaco, which has mild winters and torrid summers, Argentina lies in the south temperate zone. The pampas region has an average temperature of 60°, and freezing is rare. Temperature extremes increase

progressively southward. All over Argentina, January is the warmest month and June and July are coolest. At Buenos Aires, the mean annual temperature in January-February is about 73°; in June-July, 50°. The heaviest rainfall, over sixty inches a year, hits the Gran Chaco, while on the pampas it ranges from twenty inches in the west to forty in the northeast; at Buenos Aires it is 37.2 inches.

## Austria (Republic)

(Österreich)

Area: 32,388 square miles.

Population (census June 1, 1951): 6,918,959 (practically all Austrian).

Density per square mile: 213.6.

Allied Council: L. E. Thompson, Jr. (U. S. A.); Ivan I. Ilyichev (U.S.S.R.); Sir Harold A. Caccia (United Kingdom); Jean Payart (France).

President: Dr. Theodor Koerner.

Chancellor: Julius Raab.

Principal cities (census 1951): Vienna, 1,760,784 (capital, industrial center); Graz, 226,271 (industrial center); Linz, 185,177 (Danube port); Salzburg, 100,096 (tourist center).

Monetary unit: Schilling.

Language: German.

Religions (est.): Roman Catholic, 94%; Protestant, 3%; Jewish, 3%.

**HISTORY.** Austria, lying at the western edge of the "iron curtain" in central Europe, continued to be occupied by foreign troops after World War II.

The history of Austria before World War I was largely that of the Austro-Hungarian Empire and the Hapsburg dynasty. Its origin was in the province of Ostmark, separated from Bavaria and given to Leopold of Babenberg (A.D. 976) by the Holy Roman Emperor, Otto II. It was ruled by the Babenbergs until 1246, and later passed to Ottakar of Bohemia, who lost it to Rudolf of Hapsburg (1276). In 1437, the three kingdoms of Austria, Hungary and Bohemia were united under the rule of Albert V. For three centuries thereafter, despite almost constant warfare, the states remained for the most part under a single crown. The Hapsburgs gradually added to their possessions, until Charles V, during the 16th century, ruled a vast part of Europe. Emperor Francis I laid down the Holy Roman crown in 1806 at the height of the Napoleonic Wars, in which Austria with her allies was finally victorious. Influence in Germany was lost through defeat by Prussia in the Seven Weeks' War (1866). In 1867, the Dual Monarchy of Austria and Hungary was established, united in the person of the sovereign, Franz Josef I, who ruled until 1916.

Following the defeat of the Central Powers in World War I, the republic of Austria was established in Nov., 1918. It was confined to its present borders by the

Treaties of St. Germain (1919) and Trianon (1920). The years immediately following the war were a period of privation, dissension and riots, with Austrian currency becoming worthless and the nation bankrupt. Establishment of a semi-dictatorship by Engelbert Dollfuss, who had become Chancellor in 1932, was followed by an unsuccessful Socialist revolt (Feb., 1934) and an attempted Nazi coup d'état which failed, although Dollfuss was killed. He was succeeded by Kurt von Schuschnigg, whose futile efforts to maintain Austria's independence ended (March 12, 1938) with the bloodless occupation of Austria by Germany. Hitler proclaimed the *Anschluss* of Germany and Austria the next day.

Following the liberation of Vienna by the Red Army (April 13, 1945), Dr. Karl Renner, veteran Socialist, formed a provisional government. Elections held Nov. 25, 1945, resulted in victory for the People's Party, whose leader, Leopold Figl, became chancellor. Dr. Renner was elected president of the Second Austrian Republic (Dec. 20, 1945). He died Dec. 31, 1950; Dr. Theodor Koerner, also a Socialist, was elected President May 27, 1951. Following the Feb. 1953 elections, Julius Raab of the People's Party formed a new coalition cabinet on Apr. 2.

In the years following World War II, there seemed little prospect that Austria would soon regain her independence, since the Big Four could not agree on fundamental issues of reparations and territorial settlement.

**ALLIED MILITARY GOVERNMENT.** Since World War II, Austria within its 1937 frontiers has been divided into four national zones, as is the city of Vienna. The Allied Council and the inter-Allied governing authority of Vienna consist of the ranking officers of the four participating nations—the U. S., Britain, France and the U.S.S.R. Under an agreement signed by the four powers June 28, 1946, the Council's functions are supervisory rather than administrative.

**NATIONAL GOVERNMENT.** Austria is a federal republic comprised of nine provinces (including Vienna), each of which has its own elected assembly for the control of regional affairs. The federal parliament consists of two houses—the *Bundesrat* whose 50 members are chosen by the provincial assemblies and the *Nationalrat* whose 165 members are chosen by national election. The president of the republic is elected by national popular vote for a term of six years. The government is administered by the chancellor and his cabinet. Party standing in the *Nationalrat* after the elections of Feb. 22, 1953, was: People's Party 74, Socialist 73, Independent 14, Communist 4.



**SOCIAL AND ECONOMIC CONDITIONS.**

In 1952-53 Austria had 5,258 primary schools with 843,842 pupils, 284 secondary, technical and teachers' training schools with 88,166 pupils, and 13 institutions of higher learning, including 4 universities, with 20,756 students. Illiteracy is less than 10%.

Agriculture employs more than one-third of the population but the country is heavily dependent on imported foodstuffs. Mixed farming predominates. Rye and wheat are the leading cereals with 1953 production amounting to 421,213 and 499,417 metric tons respectively, followed by oats (360,153 tons) and barley (320,217 tons). Potato production was 3,292,796 tons; that of beet sugar, 1,058,123 tons.

Stock raising and dairy farming both in the Alpine pastures and the lowlands of the east are of importance. In 1953 there were 2,299,838 cattle, 2,642,653 hogs and 297,040 sheep.

Austria is primarily an industrial country. The metallurgical, engineering, textile and wood industries are most important. Styria is responsible for almost all the iron and steel production, which included in 1953 1,260,644 metric tons of steel and 1,320,708 tons of pig iron. Aluminum production was 49,944 tons.

Legislation providing for the nationalization of 70 firms, comprising a substantial portion of Austrian basic industry, was enacted late in 1946. Most of the industrially important regions are in the Soviet zone.

Trade statistics are as follows (in millions of schillings):

	1951	1952	1953
Exports	9,635	10,797	13,190
Imports:			
Commercial	8,541	12,002	12,352
ERP	2,743	1,957	917

Leading exports in 1953 were iron and steel and other metals (20%), timber (19%) and machinery and vehicles (12%). The principal sources of imports in 1953 were western Germany (28%), the U. S. (13%), Britain (5.8%) and Italy (7.8%). Chief customers were western Germany (20%), Italy (16%), Britain (6.9%) and the U. S. (5.8%).

There were 3,761 miles of railway in 1951, partly electrified. Water traffic is restricted for the most part to the Danube River. The major river ports are Linz and, especially, Vienna, which is also an important rail, road and air center.

Recent government financial data are as follows (in millions of schillings):

	1952	1953*	1954*
Revenue	19,781	18,967	20,696
Expenditure	19,623	19,501	22,411

\* Budget estimate.

The postwar public debt totaled 10,675,-000,000 schillings on Dec. 31, 1953.

**NATURAL FEATURES AND RESOURCES; CLIMATE.** Austria covers an area about equal to that of Scotland and includes much of the mountainous territory of the eastern Alps (about 92.3 per cent of the country is classified as mountainous). The country contains many snowfields, glaciers and snow-capped peaks. The principal river, the Danube, enters in the northwest and crosses northern Austria.

Austria possesses valuable mineral resources. In Styria lies one of the largest European deposits of iron ore. Copper is mined in Salzburg, Tyrol and lower Austria, and lead and zinc in Carinthia. Other minerals include bauxite, graphite, sulfur and manganese. Fuel resources comprise small coal deposits in lower Austria and large quantities of lignite, found everywhere except in Salzburg. Large supplies of coal and coke must be imported, but extensive water power resources are available for exploitation. Petroleum fields in the Zistersdorf and Mühlberg areas, both in the Soviet zone, produced an estimated 21,000,000 barrels in 1953. Production of lignite in 1953 was 5,574,048 metric tons; coal, 161,568 tons.

Variety is the keynote of Austria's climate. The mean annual temperature in the north ranges between 45° and 48°, and in no month does the average exceed 68°. Most of the rainfall occurs during summer; it amounts to about 40 in. annually in most of the country. In the Tyrol, mild winters and warm summers are customary.

**Belgium (Kingdom)**

(Royaume de Belgique—  
Koninkrijk België)

Area: 11,783 square miles.\*

Population (est. Dec. 31, 1952): 8,757,691 (Walloon, Flemish).

Density per square mile: 743.3.

Sovereign: Baudouin I.

Premier: Achille van Acker.

Principal cities (est. 1952, including certain suburbs): Brussels (Bruxelles), 968,139 (capital); Antwerp (Anvers), 478,917 (port and commercial center); Liège, 252,445 (iron and steel); Ghent (Gand), 218,298 (textiles).

Monetary unit: Belgian franc.

Languages: French, Flemish.

Religion: Predominantly Roman Catholic.

\* Including small areas taken over from Germany in 1949.

**HISTORY.** In 1914 and again in 1940, Belgium was crushed by German armies because its position in the Low Country area made it a highway on the invasion route to France. Highly industrial, a bit larger than Maryland and second most densely populated major European nation, Belgium emerged from World War II in fair economic condition but, politically, the country suffered crisis after crisis in



the struggle between conservatives and elements of the left, especially over the return of King Leopold III to the throne. Leopold returned to Belgium on July 22, 1950, but violent Socialist-led rioting forced him to agree to turn over his powers to his son, Baudouin. He formally abdicated July 16, 1951, and his son became king as Baudouin I.

Perhaps the earliest mention of the Belgians in history was in 57-50 B.C., when they were conquered by Julius Caesar. In the Middle Ages the Belgian towns became wealthy and virtually autonomous as great textile centers. Belgium became part of Burgundy in 1385 and, later, part of the Spanish domains of Charles V. By the Treaty of Utrecht, in 1713, Belgium went to Austria, though retaining its autonomy, and from 1792 to 1815 it held a similar status under France. United with the Kingdom of the Netherlands by the Congress of Vienna in 1815, the Belgians revolted and proclaimed independence on Oct. 4, 1830, choosing as their sovereign Leopold of Saxe-Coburg. Taking the title of King Leopold I, he ruled 1831-65.

Belgium progressed peaceably under Leopold I and his son, Leopold II, who reigned from 1865 to 1909, and was succeeded by his nephew, Albert I (1909-34).

Despite heroic Belgian resistance under the personal leadership of Albert, the country was overrun by the Germans in 1914 and occupied throughout World War I. The treaty of 1919 gave Belgium the regions of Moresnet, Eupen and Malmédy, and a mandate over Ruanda-Urundi.

As World War II approached, Belgium built a strong series of fortifications, especially along the Albert Canal. But these defenses were no great obstacle to the Germans, who invaded the country for the second time in a generation on May 10, 1940.

King Leopold III, who had succeeded his father upon the latter's death in a mountain-climbing accident in 1934, ordered the Belgians to surrender to the Nazis and was taken prisoner on May 28, 1940—eighteen days after the first German attack. The cabinet of Hubert Pierlot escaped from the country and set up a government-in-exile in London. When that government returned to Belgium on Sept. 7, 1944, King Leopold's brother, Prince Charles, was elected regent (Leopold was still a prisoner). In elections held June 4, 1950, the Christian Socialists won control of the Chamber of Deputies; succeeding Christian Socialist cabinets were headed by Jean Duvieusart (June 8), Joseph Pholien (Aug. 15) and Jean van Houtte (Jan. 15, 1952). The Christian Socialists lost their majority in the April 1954 parliamentary elections, and Socialist Achille van Acker formed a Socialist-Liberal cabinet on Apr. 22, 1954.

On March 17, 1948, Belgium signed a 50-year defense treaty with Britain, France, Luxemburg and the Netherlands, and in April, 1949, the nation joined the North Atlantic alliance.

**GOVERNMENT AND DEFENSE.** Under the 1831 constitution, Belgium is a constitutional monarchy. The ministers who constitute the cabinet must have the confidence of parliament, which consists of a 212-member chamber of deputies popularly elected, and a senate of varying membership, elected both directly and indirectly. All members serve for four years unless one or both houses are dissolved by the king, in which case new elections must be held in forty days. Belgium's nine provinces and 2,666 communes have crown-appointed officials but retain considerable autonomy with locally-elected councils.

The election of Apr. 11, 1954, returned 95 Christian Socialists (as against 108 in the June 1950 election), 86 Socialists (77), 25 Liberals (20), 4 Communists (7) and 2 others to the Chamber of Deputies.

The authorized strength of the army in 1951 was 150,000, but the term of compulsory service was reduced in 1952. The air force has about 350 combat planes. The navy, abolished in 1928, was reformed after World War II and in 1953 had 1 frigate, 4 ocean minesweepers, 1 depot ship, 1 auxiliary transport and other minor craft.

**SOCIAL AND ECONOMIC CONDITIONS.** *Education.* Education, free and universal for children from six to fourteen, is under state control in three divisions: primary, intermediate and higher. Primary schools (Dec. 1951) numbered 8,755 with 784,398 pupils; state secondary schools, lower grade, 121 with 60,089 pupils, higher grade, 159 with 51,294 pupils. There are four universities: official, Ghent and Liège; unofficial (private), Brussels and Louvain with a total of 17,593 students in 1951-52. There are also private schools, many under religious auspices. The rate of illiteracy in 1947 (7 years of age and over) was 3%. *Agriculture.* About 60 per cent of the total area is under cultivation, and one-half the farmed area is devoted to forage crops. Principal crops in 1953, in metric tons, were wheat, 547,360; oats, 453,178; barley, 188,682; rye, 198,905; sugar beets, 1,802,077; and potatoes, 1,569,093. Other crops are fodder beets, flax and fruit. The pastoral industry, especially dairy farming, flourishes. On Jan. 1, 1954, Belgium had 2,168,327 cattle, 1,161,228 hogs and 43,808 sheep.

*Manufacturing.* Belgium is one of the most highly industrialized nations in Europe, largely because of vast, readily accessible coal reserves. Steel production totaled 4,396,000 metric tons in 1953; pig iron, 4,217,000 tons.

The metallurgical, textile and building industries are important. Associated with

Iron and steel is a considerable engineering industry, shipbuilding in Antwerp, and machinery and railway stock in Brussels. The centuries-old textile industry produces linen (Courtrai); cotton (the southeast); and synthetic fibers. Antwerp, using the output of mines in the Congo and Angola, rivals Amsterdam in diamond cutting.

Foreign trade is especially vital to the Belgian economy. The Belgian-Dutch-Luxemburg customs union (Benelux), established on Jan. 1, 1948, is one of the five great trading areas in the world. Trade of Belgium and Luxembourg (in billions of francs) is as follows:

	1951	1952	1953*
Exports	132.6	122.6	113.0
Imports	127.2	123.0	121.1

\* Provisional.

Chief customers in 1953 were the Netherlands (18%), the U. S. (10%), western Germany (9%), France (9%) and Britain (8%). Leading sources of imports were the Netherlands (14%), western Germany (12%), France (11%), the U. S. (10%) and Britain (9%). Chief exports were iron and steel and products (25%), thread and fabric (8%), coal, coke and petroleum and products (7%) and copper and products (5%).

**Communications.** Inland transportation facilities are highly developed. Railroad mileage is 3,100. Navigable waterways total 998 mi., including the well-developed canal system. Before World War II, Belgium had the second largest river fleet on the Rhine. Highway mileage in 1950 totaled 6,754, mostly improved. The merchant fleet on June 30, 1953, totaled 201 ships (100 tons and over) aggregating 482,779 gross tons, according to *Lloyd's Register*. Sabena, the government-controlled airline, flew 18,115,554 miles in 1953 and carried 328,237 passengers.

**Finance.** Recent data are as follows (in billions of francs):

	1952*	1953*	1954†
Revenue	99.6	86.0	80.9
Expenditure	100.8	82.0	96.7

\* Provisional. † Budget estimate.

The national debt, consolidated, short and middle term and at sight, totaled 303,509,522,448 fr. on Dec. 31, 1953.

**NATURAL FEATURES AND RESOURCES; CLIMATE.** The northern third of Belgium is a plain extending eastward from the coast of the North Sea. North of the Sambre-Meuse Rivers is a low plateau, varying from 250 to more than 600 feet in height, and to the south lies the Ardennes plateau, rising to a maximum of about 2,300 feet. The shallowness of the North Sea off Belgium precludes the development of good harbors; some of the port advantages of Antwerp, on the Schelde River, are offset

by the fact that the approaches to it are through Dutch territory.

The principal mineral is coal; production in 1953 was 30,059,000 metric tons. The Ardennes coalfield, now nearly exhausted, extends southward into France. The Campine field lies in the northeast. Iron ore, lead and zinc also are mined, principally in the Ardennes.

Forests cover about 20 per cent of Belgium, but their products are relatively unimportant. Fishing is vital in the economy. The 1952 catch was 62,213 metric tons.

The climate is temperate. Ostend, on the sea, has an average annual temperature of 49° and annual rainfall of 27.5 inches, about like that of Chicago. Baraque Michel, in the Ardennes heights, has an average temperature of 43°, rainfall of 59.5 inches, and considerable snow in the winter.

#### BELGIAN COLONIAL EMPIRE

Country	Area (sq. mi.)	Native pop. (est. Dec. 1952)
Belgian Congo (colony)	904,974	11,788,711
Ruanda-Urundi (U. N. trust territory)	20,120	4,065,000

#### BELGIAN CONGO—Status: Colony.

Capital: Léopoldville (population Dec. 31, 1952: 257,197; Europeans, 13,045).

Governor General: Léo Pétillon.

Foreign trade (1953)\*: exports, 20,585,753,000 fr. (58% to Belgium, 16% to the U. S.); imports, 18,000,370,000 fr. (40% from Belgium, 23% from the U. S.); chief exports, copper (33%), cotton (9%), coffee.

Agricultural exports (1953, in metric tons)\*: cotton, 47,072; coffee, 33,949.

Mineral production (1952, in metric tons): copper (smelter), 205,749; tin (ingots), 2,809; cassiterite, 14,803; diamonds (mainly industrial), 11,608,828 carats; gold (refined), 364,838 oz.; uranium.

Forest exports (1953, in metric tons)\*: palm oil, 133,842; palm kernels, 88,522; gum copal, 5,377; rubber, 18,085.

\* Including Ruanda-Urundi.

The mineral-rich Belgian Congo, in central Africa, with a narrow outlet to the Atlantic through the northwestern tip of Portuguese Angola, was acquired Nov. 15, 1908, by the Belgian state from the Belgian king, Leopold II. The latter had backed exploration of the area by the English explorer, H. M. Stanley, and in 1885 had been recognized by the great powers as personal sovereign and proprietor of the Congo Free State, as it was then called. The area is now administered by a governor general responsible to the cabinet minister for the colonies. The governor general has unrestricted executive and legislative powers, and the colony has no representative institutions of its own. During World War II it furnished vital war materials to the Allies. The European population on Dec. 31, 1952, was 76,764, of whom 59,978 were Belgians.



**RUANDA-URUNDI**—Status: U. N. trust territory, united administratively with the Belgian Congo.

Capital: Usumbura.

Governor General: Léo Pétillon.

Principal products: tin, coffee, gold, cotton, hides.

Ruanda-Urundi, in east Africa, was assigned to Belgium as a mandate by the League of Nations at the end of World War I, before which it was a portion of German East Africa. It is administered under the direction of the governor general of the Belgian Congo by a vice governor general. The area, placed under U. N. trusteeship in Dec., 1946, is largely mountainous, with livestock grazing the principal native activity.

## Bhutan (Kingdom)

Area: approx. 18,000 square miles.

Population (est.): 300,000 (mostly Bhotiyas).

Density per square mile: 16.7.

Ruler: Maharaja Jigme Dorji Wangchuk.

Capital: Punakha.

Monetary unit: Indian rupee.

Language: Tibetan dialect.

Religion: Buddhism.

**HISTORY.** Bhutan is a semi-independent state lying on the southeast slope of the Himalayas, bordered on the north and east by Tibet and on the south and west by the Republic of India. The area is said to have been invaded and settled by Tibetan troops in the 9th century A.D. After almost a century of conflict between the Bhutanese and the British in India, British troops invaded the country in 1865 and negotiated an agreement under which Britain undertook to pay an annual allowance to Bhutan on condition of good behavior. A treaty signed with India in Aug., 1949, increased this subsidy and placed Bhutan's foreign affairs under Indian control.

Until 1907 Bhutan's government was under the dual control of the clergy and laity, but the country is now ruled by a hereditary maharaja.

The dominant people are the Bhotiyas, who are of Tibetan origin, speak a Tibetan dialect, and profess the same form of Buddhism as is prevalent in Tibet.

**ECONOMIC CONDITIONS.** The chief crops are rice, corn and millet; the fields, laid out on hillside terraces, are watered by an ingenious system of irrigation. Bhutan is famous for its small though sturdy mountain ponies. The chief industries are metal work, cloth weaving and fine basket and mat work. Trade is insignificant, and much of it is conducted by barter.

**NATURAL FEATURES; CLIMATE.** The whole of Bhutan presents a succession of lofty and rugged mountains running generally from north to south and separated by deep valleys. Mountains in the north

reach a height of 24,000 feet. The climate varies according to the topography. In the extreme south, rainfall amounts to as much as 200-300 inches annually.

## Bolivia (Republic)

(República Boliviana)

Area: 416,040 square miles.

Population (estimated 1952): 3,089,000 (1944: 52% Indian, 28% Mestizo, 13% white, 2% Negro, 6.8% unspecified).

Density per square mile: 7.4.

President: Víctor Paz Estenssoro.

Principal cities (census 1950): La Paz, 321,063 (de facto capital); Cochabamba, 80,795 (commercial center); Oruro, 62,975 (tin mines); Potosí, 45,758 (mining); Sucre, 40,128 (legal capital).

Monetary unit: Boliviano.

Language: Spanish.

Religion: Roman Catholic.

**HISTORY.** Famous since Spanish colonial days for its mineral wealth, modern Bolivia was once a part of the ancient Incan Empire. After the Spaniards had defeated the Incas during the first part of the 16th century, Bolivia was subjected to the Spanish Viceroyalty of Peru, and its predominantly Indian population was reduced to slavery. During the successive South American revolts against Spain in the early 19th century, Upper Peru (as Bolivia was then called) was a vast battlefield contested by Spanish and patriot troops. The country finally won its independence in 1825; the new republic was named after Simón Bolívar, South America's famed liberator.

Bolivia's political history since independence has been extremely stormy. Since 1825 it has had more than sixty revolutions, seventy presidents and eleven constitutions. No elected president has ever served out his term.

Harassed by internal strife, Bolivia lost great slices of territory to three neighbor nations. Several thousand square miles and its outlet to the Pacific were taken by Chile after a disastrous war in 1879-83. In 1903 a piece of Bolivia's Acre province, rich in rubber, was ceded to Brazil. And in 1938, after a war with Paraguay, Bolivia gave up claim to nearly 100,000 square miles of the Gran Chaco.

Recent years have been typical of Bolivia's turbulent political history, with several illegal seizures of power culminating in a leftist revolution on July 21, 1946. Elections held May 6, 1951, were indecisive, although an exiled leftist, Víctor Paz Estenssoro, obtained a near majority. A military junta which took over on May 16, 1951, was overthrown on April 11, 1952, and Paz Estenssoro became president on April 16. The three major tin mining companies were nationalized in Oct. 1952.



**GOVERNMENT.** Under the 1938 constitution, Bolivia is a republic, electing by popular vote a president every four years, a 27-member Senate every six years, and a 111-member Chamber of Deputies every four years. The president appoints the 10 members of his cabinet. The Indian majority was virtually disfranchised until July 1952, when the franchise was conferred on all those who had reached the age of 20, whether literate or illiterate.

Military service is compulsory, with a two-year training period beginning at nineteen and service on reserve until fifty. The army is fixed by law at 15,000, and there are about 12,000 federal police.

**SOCIAL AND ECONOMIC CONDITIONS.** Bolivia has an illiteracy rate estimated in 1950 at over 80 per cent, highest in Latin America. A contributing factor is the high proportion of pure Indian population. In 1950, enrollment at 1,562 primary schools was 141,831, and at 104 secondary schools, 18,029. There are five universities.

The 5,000,000 acres under cultivation produce wheat, rice, sugar, potatoes, cacao, barley, maize, coca (source of cocaine), tobacco and cotton. Production of such basic foodstuffs as wheat and rice, however, is insufficient for domestic needs, and considerable quantities must be imported. Cattle are raised in the more temperate regions of the east and south, sheep in the departments of La Paz and Cochabamba, and llamas, alpacas and vicuñas, important sources of hides, wool and meat, are raised on the plateaus by Indians whose economy is largely dependent upon them. The fur-bearing chinchilla, a native of the colder plateau regions, is also bred.

Tin and other minerals comprise almost the whole of Bolivia's exports. Since the country is landlocked, foreign trade must pass through free ports in Chile and river ports on the Amazon. Trade statistics for three years follow (in millions of U. S. dollars):

	1951*	1952*	1953*
Exports	150.8	139.4	123.3
Imports	90.4	92.6	63.1

\* Partially estimated.

Chief exports in 1953 were tin (68%) and tungsten (11%). The U. S. was the principal supplier in 1952 (46%). Leading customers were the U. S. (68%) and Britain (26%).

Railway mileage (1951) totaled 1,491, almost entirely in western Bolivia; the principal lines connect La Paz with the Chilean ports of Arica and Antofagasta. Improved roads totaled 2,815 mi. in 1950; there were about 20,000 mi. of other roads. Airlines play an important role in Bolivian transportation. In the lowlands, thousands of miles of navigable streams are the chief means of transportation.

**NATURAL FEATURES AND RESOURCES; CLIMATE.** Landlocked Bolivia is a low alluvial plain throughout 60 per cent of its area toward the east, drained by the Amazon and Plata river systems. The western part, enclosed by two chains of the Andes, is a great plateau—the Altiplano—measuring 500 by 80 miles at an average altitude of 12,000 feet. More than 80 per cent of the population lives on the plateau, which also contains La Paz, the highest capital city in the world. Lake Titicaca, half the size of Lake Ontario, is one of the highest large lakes in the world, at an altitude of 12,507 feet. Islands in the lake hold ruins of the ancient Incan civilization.

Mining is the backbone of the economy. Tin, accounting normally for 70 per cent of Bolivian exports, is by far the most important mineral, most of it coming from the plateau regions of Potosí and Oruro. During World War II, Bolivia was the world's largest tin producer.

Mineral production in 1953 was: tin, 34,836 long tons; silver, 6,113,000 ounces; copper, 4,920 short tons; zinc, 26,427 tons. Antimony, gold, lead, manganese ore, tungsten concentrates, and mercury are also produced; and uranium deposits have been reported. Southern Bolivia is rich in oil, as yet relatively unexploited. Production in 1953 amounted to about 615,000 barrels.

From its lowland tropical forests, Bolivia gets rubber, quinine bark, almonds and brazil nuts, dyewoods, mahogany, quebracho and other hardwoods. Rubber exports in 1952 were about 1,100 short tons.

The climate varies from the humid heat of the equatorial lowlands in the east to the arctic cold of the Andean peaks. In the lowlands, the average temperature is about 77°, with no great departures; rainfall is fairly heavy throughout the year (30–50 inches or more). At higher elevations in the west (to 11,000 ft.) the climate is temperate, with occasional winter frost. In the great central plateau, the weather is always cool. In La Paz it averages about 50.4; rainfall there averages about 23 inches annually.

## Brazil (Republic)

(Estados Unidos do Brasil)

Area: 3,291,416 square miles.

Population (est. 1953): 55,772,000 (1945: white, 63%; Mestizo, 21%; Negro, 14%; Indian and other, 2%).

Density per square mile: 16.9.

President: João Café Filho.

Principal cities (census 1950\*): Rio de Janeiro, 2,413,152 (capital and chief port); São Paulo, 2,227,512 (coffee and industrial center); Recife (Pernambuco), 534,463 (seaport); Salvador (Baía), 424,142 (seaport); Porto Alegre, 401,213 (seaport); Belo Hori-

zonte, 360,313 (mining); Fortaleza (Ceará), 280,084 (seaport).

Monetary unit: Cruzeiro.

Language: Portuguese.

Religion: Roman Catholic, 95%.

\* Provisional figures.

**HISTORY.** Brazil, the only Latin American nation deriving its culture and language from Portugal, is by far the largest country in South America, covering nearly half the continent. In the Western Hemisphere it is second to Canada. In the world, it ranks after the U.S.S.R., China and Canada.

Brazil was discovered in 1500 by the Portuguese admiral, Pedro Alvares Cabral. Portuguese colonization efforts began in 1532 and Brazil became a royal colony seventeen years later. The later attempts of France and Holland to colonize Brazil were defeated by the Portuguese.

During the Napoleonic wars, the prince regent of Portugal (later King John VI) fled his country in advance of the French armies, and set up his royal court at Rio de Janeiro in 1808. John was drawn home by a revolution in 1820 and the Brazilians, after holding the seat of Portuguese government, rebelled at resuming colonial status and declared their independence in 1822 under Pedro, son of John VI. Harassed by trouble with his parliament, Pedro I abdicated in 1831 in favor of his five-year-old son, who became emperor in 1840 as Pedro II. He was a popular monarch.

Despite his good works, however, Pedro II was forced to abdicate in 1889 following a military revolt, after which a republic was set up. Until 1893 Brazil was under two military dictators, Marshal Deodoro da Fonseca and Marshal Floriano Peixoto. After a revolt against the latter in 1893, Brazil returned gradually to stability under a succession of civilian presidents.

The president during World War I, Wenceslau Braz, co-operated with the Allies and declared war on Germany Oct. 26, 1917. Pres. Washington Luiz Pereira da Souza, 1926-30, had to cope with the world depression and was overthrown by a revolutionary group under Getúlio Vargas, who took over as provisional president.

Vargas' new constitution in 1934 sharply curtailed state's rights and emphasized a nationalistic policy. In 1937 Vargas seized absolute power, setting up another constitution which extended his term of office indefinitely. In World War II, Brazil co-operated well with the United Nations. Allied air bases were set up in Brazil, Brazilian naval forces patrolled the South Atlantic, and a Brazilian expeditionary force fought in Italy after the nation's declaration of war against the Axis in Aug., 1942.

National fear that Vargas would never fulfill his promise of free elections led to his overthrow on Oct. 29, 1945, and the

transfer of his powers to Chief Justice José Linhares. In the subsequent elections, on Dec. 2, 1945, victory went to the Vargas candidate—Gen. Eurico Gaspar Dutra, inaugurated as president on Jan. 31, 1946.

Vargas returned to the political arena in 1950 and was elected president Oct. 3 as candidate of the left-of-center Labor party. He took office Jan. 31, 1951.

**GOVERNMENT AND DEFENSE.** Under the Constitution of 1946, Brazil is a union of twenty states, five territories and one federal district. The president is popularly elected for a five-year term and may not succeed himself. The national Congress is composed of two houses—the Senate, whose members serve for eight-year terms, and the Chamber of Deputies, elected for four-year terms. Members of Congress are elected by equal, direct, compulsory and secret suffrage under a system of proportional representation.

**Defense.** Military service is compulsory beginning at twenty-one, with an initial training period of one year and service on reserve until forty-five.

The army received a considerable amount of U. S. lend-lease military goods during World War II. The air force, under a separate Ministry of Aviation since 1941, expanded during the war and took an active part in the Italian campaign.

The navy on Jan. 1, 1954, had in active service 2 cruisers, 9 fleet destroyers, 16 frigates and escort vessels, 3 submarines and other smaller craft.

**SOCIAL AND ECONOMIC CONDITIONS.**  
**Education.** Education is free and compulsory; under the 1946 constitution it is given in Portuguese only. According to the 1950 census, 51.6% of the population 10 years of age and over could read and write. In 1951 there were 82,678 primary schools with 5,350,401 pupils, (1949) 1,993 secondary schools with 389,762 students and 3,186 technical and commercial schools with 193,180 students. There are 11 universities, of which 3 are private (Catholic), 7 state and one federal (University of Brazil at Rio de Janeiro).

**Agriculture.** Agriculture is the basis of Brazil's economy, but only 4 per cent of its area is under cultivation, the rest being grazing, forest, or non-productive land. Brazil leads the world in production of coffee and castor beans, and ranks second in cacao. Production and export of both coffee and cacao are government-controlled. The most important agricultural products in 1952-53 were coffee, 19,170,000 bags of 132 lb. each; cacao, 96,500 metric tons; rice, 2,725,000 tons; wheat, 586,000 tons; refined sugar, 2,044,000 tons; maize, 6,245,000 tons. Other crops include tobacco, sisal, fruit, cotton, bananas and coconuts.

**Livestock** is raised nearly everywhere, with the great centers in the central and



southern states. On Dec. 31, 1952, there were 55,853,900 cattle, 30,915,640 hogs and 16,263,570 sheep.

**Manufacturing.** Manufacturing is still primarily for domestic consumption, but industrialization is progressing rapidly.

The state of São Paulo is by far the leading industrial area. Leading products are foodstuffs, textiles, chemicals and pharmaceutical products, metallurgical products, clothing, leather, glass and porcelain, paper and rubber articles.

Brazil's first steel plant, at Volta Redonda, began production on June 23, 1946. Production of pig iron and ferroalloys in 1953 was 880,000 metric tons and steel, 984,000 tons.

Foreign trade, largely hemispheric, has been retarded by scarcity of dollar exchange. Trade statistics for 3 years follow (in billions of cruzeiros):

	1951	1952	1953
Exports	32.51	26.07	32.05
Imports	37.20	37.18	25.15

In 1953, Brazil's chief customers were the U. S. (48%), Germany (10%), France (6%) and Britain (5%). Leading suppliers were the U. S. (28%), Argentina (14%) and France (9%). Chief exports were coffee (68%), cotton (7%) and cacao (5%).

Major imports include machinery, foodstuffs (largely Argentine wheat), vehicles and petroleum products.

**Communications.** The coastwise and river steamers are the main links between north and south Brazil, especially within the Amazon basin where inland waterways are the only means of land communication. Navigable waterways total 26,713 miles. Coastwise traffic is restricted to Brazilian ships, but the Amazon is open to all ships. According to *Lloyd's Register*, the merchant marine had 384 vessels (100 tons and over) aggregating 854,058 gross tons on June 30, 1953.

Railway mileage in 1951 was about 23,000, mostly located south of Recife. Railway development has been hampered by natural obstacles, especially by coastal mountains, but extensive government and private building is under way. Highways total 38,000 miles, and common roads about 124,000 miles. Brazil is served by numerous domestic and foreign airlines; mileage flown by domestic lines in 1951 was 60,000,000; passengers carried, 2,200,000. **Finance.** Recent data are as follows (in billions of cruzeiros):

	1952	1953,	1954*
Revenue	30.7	37.1	46.0
Expenditure	28.5	39.9	45.0

\* Budget estimate.

**NATURAL FEATURES AND RESOURCES; CLIMATE.** Brazil covers about three-sevenths of South America, extends 2,965 miles north-south, 2,691 miles east-west,

and borders every South American state except Chile and Ecuador. Its area would more than blanket that of the U. S.

There are two principal physical divisions of the Brazilian surface. The lowlands are made up of the heavily forested tropical river basin of the Amazon, the world's largest drainage area; and the less heavily forested basin of the Plata to the south. The intermediate highland is a vast plateau, 1,000 to 3,000 feet above sea level, traversed by several low mountain ranges, and extending almost from the seacoast to the Bolivian frontier and south to the plains of Rio Grande do Sul. The Central plateau comprises more than half of the country and, with the narrow coastal plain, supports 90 per cent of the population.

More than a third of Brazil is drained by the Amazon and its more than 200 tributaries. The Amazon is navigable for ocean steamers to Iquitos, Peru, 2,300 miles upstream. Southern Brazil is drained by the Plata system—the Paraguay, Uruguay and Paraná Rivers. The most important stream entirely within Brazil is the São Francisco, navigable for a thousand miles but broken near its mouth by the 260-foot Paulo Afonso Falls, with estimated potential 1,000,000 horsepower.

**Mineral Resources.** Brazil's vast mineral resources are among her least developed assets. The most important are coal (estimated reserves of 5,000,000,000 tons; estimated 1952 production, 1,960,000 metric tons) and iron ore, found chiefly in Minas Gerais (1952 output, 2,972,000 metric tons). Other important minerals, with estimated 1952 production, are gold, 141,600 troy ounces; diamonds, 200,000 carats; bauxite, 19,000 metric tons; manganese ore, 160,000 metric tons; tungsten; silver; quartz crystals; uranium; chrome ore; graphite; petroleum and titanium.

**Forests and Fisheries.** More than half of Brazil's total area is forested, but the extensive resources are relatively undeveloped. The largest single forest commodities are timber, chiefly pine from the southern states, and the wax of the carnauba palm, used for insulation and phonograph records and produced commercially only in Brazil (exports 1953: 7,000 metric tons). Rubber production, mostly in the Amazon basin, was estimated in 1952 at 26,650 metric tons, but it has not developed as extensively as was once expected. Other forest products are Brazil nuts, yerba maté (Paraguay tea), medicinal plants, and vegetable oils. There are vast fishing banks and grounds in the rivers and along the coast, with some 2,500 species of fish.

**Climate.** Brazil is almost wholly in the torrid zone, but such factors as altitude, prevailing winds, rainfall and distance from the sea combine to vary the climate



from tropical to temperate. Manaus on the Amazon has an average temperature of 80.9° and annual rainfall of 71.65 inches. The corresponding figures for Rio de

Janeiro are 72.5° and 44 inches. February is usually the warmest month in Rio de Janeiro. In much of the Amazon basin, rainfall averages 80 inches.

## BRITISH COMMONWEALTH OF NATIONS

This is a world-wide community of eight independent nations, officially termed The Commonwealth of Nations (the United Kingdom, Australia, Canada, Ceylon, India, New Zealand, Pakistan and the Union of South Africa) and their dependencies or semidependent territories bound together by allegiance to the British crown or by recognition of the British sovereign as head of the Commonwealth and symbol of free and equal association of countries within its framework.

### EUROPE

#### United Kingdom of Great Britain and Northern Ireland

**Area:** 93,371 square miles (excluding Channel Islands and Isle of Man).

**Population** (est. June 1953): 50,592,000 (English, Scotch, Welsh, Irish).

**Density** per square mile: 541.8.

**Ruler:** Queen Elizabeth II.

**Prime Minister:** Sir Winston Churchill.

**Principal cities** (census 1951): London (Greater), 8,346,137 (capital); Birmingham, 1,112,340 (iron and steel); Glasgow, 1,089,555 (seaport, shipbuilding); Liverpool, 789,532 (seaport); Manchester, 703,175 (textiles); Sheffield, 512,834 (steel, cutlery); Leeds, 504,954 (clothing); Edinburgh, 466,770 (capital, Scotland).

**Monetary unit:** Pound sterling (£).

**Languages:** English, Welsh, Gaelic.

**Religion:** Church of England (established church); Church of Wales (disestablished); Church of Scotland (established church—Presbyterian); Church of Ireland (disestablished); Roman Catholic; Methodist; Congregational; Baptist; Jewish.

**HISTORY.** Roman invasions of the 1st century B.C. brought Britain into contact with the continent. When the Roman legions withdrew in the 4th century A.D., Britain fell easy prey to the invading hordes of Angles, Saxons and Jutes from Scandinavia and the Low Countries. Seven large kingdoms were established, and the original Britons were forced into Wales and Scotland. It was not until the 11th century that the country finally became united under the Danish King Canute. Following the death of Edward the Confessor (1066), a dispute as to the succession arose, and William Duke of Normandy invaded England, defeating the Saxon noble, Harold II, at the Battle of Hastings (1066). The Norman conquest was accompanied by the introduction of Norman law and feudalism, changing the customs of England.

The reign of Henry II (1154-89), first of the Plantagenets, saw an increasing centralization of royal power at the expense of the nobles, but in 1215 John (1199-1216) was forced to sign the Magna Carta, which awarded the people, especially the nobles, certain basic rights. Edward I (1272-1307) continued the conquest of Ireland, reduced Wales to subjection, and made some gains in Scotland. In 1314, however, English forces led by Edward II were ousted from Scotland after the battle of Bannockburn. The late 13th and early 14th centuries saw the development of a separate House of Commons with tax-raising powers.

Edward III's claim to the throne of France led to the Hundred Years' War (1338-1453), which ended with the loss of almost all the large English territory in France. In England the great poverty and discontent caused by the war was intensified by the Black Death, a plague which reduced the population by about one-third. The Wars of the Roses (1455-85), a struggle for the throne between the House of York and the House of Lancaster, were ended by the victory of Henry Tudor (Henry VII) at Bosworth Field (1485).

During the reign of Henry VIII (1509-47), the Church in England asserted its independence from the Roman Catholic Church. Under Edward VI and Mary, the two extremes of religious fanaticism were reached and it remained for Henry's daughter, Elizabeth I (1558-1603), to settle the Church of England on a moderate basis. In 1588 the Spanish Armada, a fleet sent out by Catholic King Philip II of Spain, was defeated by the English and destroyed during a storm. It was during Elizabeth's reign that England became a world power.

Elizabeth's heir was of the house of Stuart—James VI of Scotland—who joined the two crowns as James I (1603-25). The Stuart kings incurred large debts and were forced either to depend on Parliament for taxes or to raise money by illegal means. In 1642 war broke out between Charles I and a large portion of the Parliament; Charles was defeated and executed in 1649, and the monarchy was then abolished. The Puritan Commonwealth endured for ten years, but after the death (1658) of Oliver Cromwell, the Lord Protector, the government fell to pieces and Charles II was restored to the throne in 1660. The struggle

## The Commonwealth of Nations

## Europe

Political subdivision	Area (sq. mi.)	Population
United Kingdom	93,371	50,592,000 <sup>3</sup>
Channel Islands	75	102,770 <sup>1</sup>
Isle of Man	221	55,213 <sup>1</sup>
Gibraltar	2	22,848 <sup>1</sup>
Malta	122	320,613 <sup>3</sup>

## Africa

Anglo-Egyptian Sudan	967,500	8,786,000 <sup>3</sup>
Basutoland	11,716	583,000 <sup>3</sup>
Bechuanaland	275,000	292,000 <sup>3</sup>
Gambia	4,074	278,000 <sup>3</sup>
Gold Coast (including Togoland)	91,843	4,478,000 <sup>3</sup>
Kenya	224,960	5,851,000 <sup>3</sup>
Mauritius and dependencies	807	524,867 <sup>3</sup>
Nigeria (including British Cameroons)	372,674	31,500,000 <sup>3</sup>
Rhodesia and Nyasaland, Federation of:		
Northern Rhodesia	290,323	2,015,000 <sup>3</sup>
Nyasaland	47,949	2,463,785 <sup>2</sup>
Southern Rhodesia	150,333	2,259,900 <sup>3</sup>
St. Helena and dependencies	126	5,355 <sup>3</sup>
Seychelles	156	37,129 <sup>3</sup>
Sierra Leone	27,925	2,000,000 <sup>2</sup>
Somaland	67,936	640,000 <sup>3</sup>
South-West Africa	317,725	430,354 <sup>1</sup>
Swaziland	6,705	202,000 <sup>2</sup>
Tanganyika Territory	362,688	8,069,000 <sup>3</sup>
Uganda	93,981	5,343,000 <sup>3</sup>
Union of South Africa	472,550	13,153,000 <sup>3</sup>
Zanzibar and Pemba	1,020	272,000 <sup>3</sup>

## America

Bahamas	4,404	84,841 <sup>3</sup>
Barbados	166	222,942 <sup>3</sup>
Bermudas	19	39,983 <sup>3</sup>
British Guiana	89,480	463,000 <sup>3</sup>
British Honduras	8,598	75,778 <sup>3</sup>
Canada	3,619,616	14,780,000 <sup>3</sup>
Falkland Islands and dependencies	4,618	3,713 <sup>3</sup>

## America—(cont.)

Political subdivision	Area (sq. mi.)	Population
Jamaica and dependencies	4,722	1,473,000 <sup>2</sup>
Leeward Islands	423	119,700 <sup>2</sup>
Trinidad and Tobago	1,978	678,300 <sup>3</sup>
Windward Islands	821	290,000 <sup>2</sup>

## Asia

Aden colony	80	100,000 <sup>2</sup>
Aden protectorate	112,000	800,000 <sup>2</sup>
Bahrain Islands	213	110,000 <sup>1</sup>
Borneo:		
Colony of North Borneo	29,417	355,000 <sup>3</sup>
Brunei	2,226	50,000 <sup>2</sup>
Sarawak	50,000	592,000 <sup>3</sup>
Ceylon	25,332	8,103,648 <sup>3</sup>
Cyprus	3,572	510,000 <sup>3</sup>
Hong Kong	391	2,250,000 <sup>3</sup>
India, Republic of	1,220,099	356,891,624 <sup>1</sup>
Malaya:		
Malayan Federation	50,680	5,705,952 <sup>3</sup>
Singapore and dependencies	282	1,123,172 <sup>3</sup>
Pakistan	337,524	75,842,165 <sup>1</sup>

## Oceania

Australia, Commonwealth of	2,974,581	8,917,763 <sup>3</sup>
Fiji	7,040	312,878 <sup>2</sup>
Gilbert and Ellice Islands	312	38,000 <sup>2</sup>
Nauru	8	3,000 <sup>1</sup>
New Hebrides	4,633	53,000 <sup>2</sup>
New Zealand	103,416	2,087,740 <sup>4</sup>
Norfolk Island	13	1,140 <sup>2</sup>
Papua-		
New Guinea	183,540	1,472,000 <sup>1</sup>
Solomon Islands	11,458	99,000 <sup>2</sup>
Tonga (Friendly Islands)	250	51,402 <sup>3</sup>
Western Samoa	1,133	85,416 <sup>2</sup>

(Note: Each population figure is followed by superior number denoting the year of estimate or census: <sup>1</sup> for 1954, <sup>2</sup> for 1953, <sup>3</sup> for 1952, <sup>4</sup> for 1951, <sup>5</sup> for 1950.

between the King and Parliament continued, but Charles II knew when to compromise. His brother James II (1685–88) possessed none of his ability and was ousted by the Revolution of 1688, which confirmed the predominant position of Parliament. James' daughter, Mary, and her husband, William of Orange, now ruled jointly.

The reign of Queen Anne (1702–14) was marked by the Duke of Marlborough's victories over France at Blenheim, Oudenarde and Malplaquet in the War of the Spanish

Succession. England and Scotland meanwhile were joined together by the Act of Union (1707). Upon the death of Anne, the distant claims of the elector of Hanover were recognized, and he became King of England as George I.

The 18th century was a period of gradual growth and change. At home the unwillingness of the Hanoverian kings to rule resulted in the formation by the King's ministers of a cabinet, headed by a prime minister, which directed all public business. Abroad the constant wars with France

resulted in expansion of the British Empire all over the globe, particularly in North America and India. This imperial growth was checked by the revolt of the American colonies (1775-81).

The age-long struggle with France broke out again in 1793, and during the lengthy Napoleonic Wars, which ended at Waterloo (1815), England was pitted at one time against almost all of Europe.

The Victorian era, named after Queen Victoria (1837-1901), saw the growth of a democratic system of government which had begun with the Reform Bill of 1832. The two important wars in Victoria's reign were the Crimean War against Russia (1853-56) and the Boer War (1899-1902). The latter was accompanied by enormous extension of England's sway throughout Africa.

The reign of Edward VII (1901-10) was marked by increasing uneasiness at home and abroad. Within four years after the accession of George V (1910), England entered World War I when Germany invaded Belgium. The nation was led by coalition cabinets headed first by Herbert Asquith and then (Dec., 1916) by the Welsh statesman, David Lloyd George. The years after the war were marked by labor unrest which culminated in the general strike of 1926. A Labour ministry formed early in 1924 by Ramsay MacDonald fell in October of that year. In 1929 a second Labour government was formed, but the world economic depression forced a change in 1931, and a national government was formed composed chiefly of Conservative members, although MacDonald remained prime minister until 1935. King Edward VIII succeeded to the throne in 1936 on his father's death but abdicated eleven months later (in order to marry an American, Wallis Warfield Simpson, whose second divorce was then pending) in favor of his brother, who became King George VI.

The efforts of Prime Minister Neville Chamberlain to meet by peaceful means the rising tide of Nazism in Germany failed with the German invasion of Poland (Sept. 1, 1939), which was followed by England's entry into World War II (Sept. 3, 1939). Serious Allied reverses in the spring of 1940 led to Chamberlain's resignation and the formation of another coalition war cabinet by Conservative leader Winston Churchill, who led England through most of World War II. Churchill resigned as the coalition leader shortly after V-E Day, but then formed a "caretaker" government which remained in office until after the parliamentary elections of July 5, 1945, in which the Labour party won an overwhelming victory. The government formed by Clement R. Attlee on July 26 began a moderate socialistic program.

Internationally, the Attlee government

continued Britain's close co-operation with the United States through the North Atlantic Treaty and in the Korean war, at the same time solidifying its position in Western Europe in opposition to the U.S.S.R. The Labour regime, returned to office by a slight majority in the parliamentary elections of Feb. 1950, lost by a narrow margin in the Oct. 1951 elections. On Oct. 26 Winston Churchill again became prime minister at the head of a Conservative government.

George VI died Feb. 6, 1952, and was succeeded by his daughter, Elizabeth II.

#### AREA AND POPULATION OF MAJOR SUBDIVISIONS\*

Subdivision	Area sq. mi.	Population, est. June 1953
England	50,870	44,090,000
Wales	7,469	
Scotland	29,794	5,118,000
Northern Ireland	5,238	1,384,000

\* Not including Channel Islands and Isle of Man.

† Provisional figures.

**RULER.** Queen Elizabeth II, born April 21, 1926, elder daughter of King George VI and Queen Elizabeth, succeeded to the throne on the death of her father, Feb. 6, 1952; married Nov. 20, 1947, to Prince Philip, Duke of Edinburgh, born June 10, 1921; their children are Prince Charles (heir presumptive), born Nov. 14, 1948, and Princess Anne, born Aug. 15, 1950. The Queen's sister is Princess Margaret Rose, born Aug. 21, 1930; her uncles are Prince Edward Albert, Duke of Windsor (formerly King Edward VIII), born June 23, 1894, and Prince Henry William, Duke of Gloucester, born March 31, 1900.

**GOVERNMENT & DEFENSE.** The United Kingdom is a constitutional monarchy, with a queen and a Parliament which has two houses: the House of Lords with about 805 hereditary peers, 26 spiritual peers, 16 Scottish representative peers, a number of Irish representative peers (vacancies are no longer filled), and a few life peers who hold or have held high judicial office; and the House of Commons, numbering since 1950 625 members elected by practically universal suffrage. Supreme legislative power is vested in Parliament, which holds office for five years unless sooner dissolved. The executive power of the Crown is exercised by the Cabinet, headed by the prime minister. The latter, normally the head of the party commanding a majority in the House of Commons, is appointed by the sovereign, with whose consent he in turn appoints the rest of the Cabinet. All ministers must be members of one or the other house of Parliament; they are individually and collectively responsible to the Crown, the prime minister and Parliament. The Cabinet proposes bills and ar-



ranges the business of Parliament but it depends entirely on the votes of confidence in Commons. The lords cannot hold up "money" bills, but they can delay other bills for a period of at least one year.

By the Act of Union (1707) the Scottish parliament was assimilated with that of England, and Scotland is now represented in Commons by 71 members. The Secretary of State for Scotland, a member of the Cabinet, is responsible for the administration of Scottish affairs.

Parliamentary elections held in Oct. 1951 returned 321 Conservatives and associates, 294 Labour party, 6 Liberals, 2 Irish nationalists and 1 Irish Labour. Polling at contested elections was: Conservative, 12,660,071; Labour, 13,948,985; Liberal, 730,551; National Liberal, 1,058,048; Communist, 21,640; others, 177,329.

The members of the Cabinet (June 1954): Sir Winston Churchill (Prime Minister, First Lord of the Treasury), Anthony Eden (Secretary of State for Foreign Affairs), Marquess of Salisbury (Lord President of the Council), Harry Crookshank (Lord Privy Seal), Lord Simonds (Lord Chancellor), Earl Alexander (Minister of Defense), Sir David Maxwell Fyfe (Secretary of State for the Home Department and Welsh Affairs), Richard A. Butler (Chancellor of the Exchequer), Viscount Swinton (Secretary of State for Commonwealth Relations), Oliver Lyttelton (Secretary of State for the Colonies), Sir Walter Monckton (Minister of Labour and National Service), James Stuart (Secretary of State for Scotland), Harold Macmillan (Minister of Housing and Local Government), Peter Thorneycroft (President of the Board of Trade), Viscount Woolton (Chancellor of the Duchy of Lancaster and Minister of Materials), Sir Thomas Dugdale (Minister of Agriculture and Fisheries), Florence Horsbrugh (Minister of Education), Gwilym Lloyd-George (Minister of Food).

**Local Government.** Both England and Wales are divided into 62 administrative counties, including the county of London, and 83 county boroughs. The counties are administered by the justices and by popularly elected county councils. All incorporated towns are administered by a municipal corporation consisting of the mayor, aldermen and burgesses. Local government in Scotland is comparable to that in England and Wales.

**Judiciary.** The ultimate British court of appeal is the House of Lords; the final court of appeal for certain of the Dominions is the Judicial Committee of the Privy Council. Below the House of Lords on the civil side is the High Court of Judicature, divided into two parts, the Court of Appeal, and the High Court of Justice. On the criminal side is the Court of Criminal Appeal, which is the court of

last resort barring the rare allowance of an appeal to the Lords. Actually these superior courts hear only a small fraction of the cases, and most of the trials are held in a complicated system of inferior courts, exercising original jurisdiction. The Lord Chancellor, Lord Chief Justice, Lords of Appeal in Ordinary (law members of the House of Lords), and Lord Justices of Appeal are appointed by the Prime Minister.

**Defense.** Compulsory military service, introduced in May, 1939, is still in effect, and will continue until 1959 under the terms of National Service acts since passed. An act passed in 1950 makes 2 years' national service compulsory for men between 18 and 26. The armed forces are comprised of three separate services—the Army, the Royal Navy and the Royal Air Force. The Prime Minister retains supreme responsibility for defense, but the Minister of Defense has coordinating and executive duties.

Service ministers are no longer Cabinet members but continue to be members of the Defense Committee headed by the Prime Minister with the Minister of Defense as deputy chairman; this committee is responsible to the Cabinet both for the review of current strategy and for coordinating departmental action in preparation for war.

**Military-budget estimates for the fiscal year 1954-55 follow:**

	Estimate	Strength*
Navy	£367,000,000	139,000
Army	£561,000,000	440,000
Air	£537,000,000	269,200

\* Maximum during period.

Control of the land forces is exercised by the Army Council, headed by the Secretary of State for War. Its members include the Chief of the Imperial General Staff, the Adjutant General and Quartermaster General.

The Royal Navy is controlled by the Board of Admiralty, headed by the First Lord of the Admiralty, who is responsible to Parliament. Other members include the First Sea Lord and Chief of Naval Staff. In Dec. 1953, the Royal Navy had in active service and in reserve 6 fleet carriers, 8 light aircraft carriers, 4 escort carriers, 5 battleships, 25 cruisers, 85 destroyers, 57 submarines, 2 coast defense ships and 192 frigates and destroyer escorts. Seven aircraft carriers, 3 cruisers and a number of frigates and minor craft were under construction.

Naval losses during World War II totaled 2,831 vessels, including 3 battleships, 2 battle cruisers, 5 fleet carriers, 3 auxiliary carriers, 23 cruisers, 139 destroyers and 76 submarines.

Control of the Royal Air Force is vested in an Air Council analogous to the Army

Council and headed by the Secretary of State for Air. The Fleet Air Arm was transferred to the Royal Navy in 1937.

A total of 5,896,000 men served in the armed forces during World War II; there were also 640,000 in the Women's Auxiliary Forces. Units of the navy, army and air force served in Korea.

Research and development in the field of atomic energy and weapons is the responsibility of the Atomic Energy Authority.

#### SOCIAL AND ECONOMIC CONDITIONS.

**Education.** The school system in England and Wales has undergone considerable change since enactment of the Education Act of 1944. This measure makes primary and secondary training available for all children at public expense, with the secondary stage starting at the age of 11. The school-leaving age was raised from 14 to 15 on April 1, 1947. Statistics for the school year 1951-52 are as follows:

England and Wales: primary and secondary schools 28,196, pupils 5,970,012; special schools 658, pupils 51,591. Scotland: primary and secondary schools 3,030, pupils 798,076.

In 1952-53 the 13 English universities and 4 university colleges had 68,842 students, the University of Wales 4,420 and the 4 Scottish universities 15,430.

**Agriculture.** Agriculture remains one of Britain's chief industries, employing about 1,000,000 persons.

#### LEADING AGRICULTURAL PRODUCTS

(in thousands)

	1952		1953*	
	Acres	Long tons	Acres	Long tons
Wheat	2,030	2,307	2,217	2,664
Barley	2,281	2,334	2,226	2,521
Oats	2,882	2,772	2,840	2,821
Sugar beets	408	4,236	415	5,269
Potatoes	990	7,848	985	8,260

\* Provisional.

Livestock (June 30, 1953) included 10,-444,000 cattle, 22,455,000 sheep, 5,165,000 hogs and 92,119,000 poultry. Cattle occupy a predominant position in British agriculture, accounting for about 40 per cent of the total farm output. Production of cheese (1953, including farmhouse) was 88,000 long tons; butter (including farmhouse), 20,000; beef and veal, 601,100; mutton and lamb, 167,000; bacon and ham (commercial), 243,800; pork (commercial), 241,000; wool (fleece), 30,600.

**Industry.** The most important British manufacture is heavy goods such as machinery, tools, bridges and locomotives; industry is concentrated in the north and Midlands of England. Sheffield is the center of the steel industry, while the china industry is concentrated in the Midlands.

The cotton industry is centered in Lancashire; Liverpool, Manchester, Oldham, Preston and Bolton are the main manufacturing towns. The wool industry, England's oldest large trade, is located just east of the cotton towns, at Leeds, Bradford and Hull in Yorkshire. An important industrial region is the central Lowlands of Scotland, where woollens, silks, linens, cottons, lace, glass, paper, steel and pig iron are produced. Important shipyards are located along the coast. Vessels aggregating 1,250,-263 gross tons were completed in 1953; they represented about 30% of the world total. On Mar. 31, 1954, 323 vessels of 2,175,760 gross tons were under construction in the United Kingdom. Steel production in 1953 was 17,610,000 long tons; that of pig iron, 11,180,000 tons. The iron and steel industry passed into public ownership in 1951 but was denationalized in 1953.

In Apr., 1948, there were 51,050 industrial establishments having more than 10 employees; the total working population on Dec. 31, 1953, was 23,474,000.

**Trade.** The United Kingdom's economic prosperity is dependent on its foreign trade, and the nation made great efforts after World War II to build up its volume of exports.

#### OVERSEAS TRADE

(Value in millions of pounds sterling)

	Imports	Exports	Re-exports
1951	3,903.8	2,579.7	127.0
1952	3,477.0	2,584.2	143.9
1953*	3,344.9	2,582.0	105.4
1954†	822.7	673.2	28.0

\* Provisional. † First three months.

#### LEADING EXPORTS AND IMPORTS

(in millions of pounds sterling)

Exports			
	1952	1953*	
Vehicles, ships and aircraft	479.8	470.3	
Machinery and parts	421.8	404.6	
Iron and steel and manufactures	191.6	197.0	
Woolen and worsted yarns and manufactures	123.9	139.8	
Cotton yarns and manufactures	148.0	133.4	
Imports			
	1952	1953*	
Oilseeds and nuts	404.7	350.1	
Meat	221.3	263.1	
Wool	177.1	238.9	
Grain and flour	262.2	238.8	
Beverages and cocoa preparations	167.0	178.1	

\* Provisional.

## DISTRIBUTION OF TRADE, 1951-53

(millions of pounds sterling; 1953, provisional)

Chief Destinations of Exports			
	1951	1952	1953
Australia	323.8	220.9	212.9
United States	136.3	146.0	158.8
South Africa	165.1	144.8	158.0
Canada	137.2	129.7	156.8
India	115.2	112.6	114.5
New Zealand	110.5	115.3	100.3

Chief Sources of Imports			
	1951	1952	1953
Canada	260.9	319.8	304.2
Australia	252.1	225.1	294.4
United States	379.8	314.5	253.8
New Zealand	164.7	165.7	169.6
Kuwait	*	136.0	129.7
Denmark	114.7	118.1	128.5

\* Not separately distinguished.

**Communications.** The merchant marine on June 30, 1953, totaled 6,079 ships (100 tons and over) with a gross tonnage of 18,692,299—about 20% of the world total and second only to the U. S. merchant fleet. Losses during World War II totaled 2,426 vessels of 11,331,933 gross tons.

Nationalization of the railway and canal systems in Great Britain became effective Jan. 1, 1948, and they are now operated by the government's Transport Commission. Railway mileage in the United Kingdom (1950) was 20,469; in 1953, 1,003,100,000 passengers and 291,100,000 long tons of freight were carried. The total length of public highways is 183,477 miles, of which 157,089 are in England and Wales and 26,388 in Scotland. In Nov. 1953, licensed motor vehicles totaled 5,142,000, including 2,720,000 cars and 925,000 commercial trucks. Radio receiving licenses in Dec. 1953 numbered 10,177,000; television sets, 3,173,000.

British air services throughout the world are nationalized under the Minister of Civil Aviation. Service is supplied by two public corporations—British Overseas Airways (BOAC) and British European Airways. In 1952, they flew 58,028,000 air miles and carried 1,703,000 passengers.

**Finance.** Recent data are as follows (in millions of pounds):

	1952-53	1953-54	1954-55*
Revenue	4,438.7	4,368.1	4,532.9
Expenditure	4,350.6	4,274.0	4,522.4

\* Budget estimate.

Notes in circulation on Mar. 31, 1954, totaled £1,576,900,000. The net deadweight debt on Mar. 31, 1954, was £26,583,000,000 (1953: £26,024,000,000; 1952: £25,860,000,000; 1951: £25,921,600,000).

## ESTIMATED REVENUE AND EXPENDITURE 1954-55

Estimated Revenue	
Income tax	£1,800,000,000
Surtax	132,000,000
Death duties	164,375,000
Stamps	55,000,000
Profits tax and excess profits tax	172,000,000
Excess profits levy	60,000,000
Other inland revenue duties	1,000,000
<b>Total inland revenue</b>	<b>£2,384,375,000</b>
Customs	1,062,500,000
Excise	719,000,000
<b>Total customs and excise</b>	<b>£1,781,500,000</b>
Motor vehicle duties	77,000,000
<b>Total receipts from taxes</b>	<b>£4,242,875,000</b>
Wireless licenses	21,000,000
Receipts from sundry loans	24,000,000
Miscellaneous	245,000,000
<b>Total estimated revenue</b>	<b>£4,532,875,000</b>

## Estimated Expenditure

<b>Consolidated fund:</b>	
National debt service	570,000,000
Sinking funds	36,000,000
<b>Payments to</b>	
Northern Ireland Exchequer	51,000,000
<b>Misc. consolidated fund expenditures</b>	
	10,000,000
<b>Total consolidated fund</b>	<b>£667,000,000</b>
<b>Supply services: Defense:</b>	
Army	561,000,000
Navy	367,000,000
Air	537,000,000
Ministry of Supply	151,000,000
Ministry of Defense	23,904,000
<b>Total supply services</b>	<b>£1,639,904,000</b>
<b>Less sterling counterpart of economic aid appropriated-in-aid of defense votes</b>	
	85,360,000
	<b>£1,554,544,000</b>

## Civil service:

Central government and finance	20,808,000
Commonwealth and foreign	106,995,000
Home department, law and justice	85,852,000
Education and broadcasting	328,537,000
Health, housing, local government	612,698,000
Trade, labor, materials and supply	140,785,000



Works, station- ery, etc.	68,502,000
Agriculture and food	338,026,000
Transport, fuel, power and in- dustrial re- search	138,639,000
Pensions, national insurance, national assist- ance	412,783,000
Total civil service	£2,253,625,000
Post office (excess over revenue)	340,000
Tax collection	46,890,000
Total estimated expenditure	£4,522,399,000
Surplus	10,476,000
Grand total	£4,532,875,000

**NATURAL FEATURES AND RESOURCES;**  
**CLIMATE.** The United Kingdom, consisting of England, Wales, Scotland and Northern Ireland, is a third the size of Texas. England, in the southeast part of the British Isles, is separated from Scotland on the north by the granite Cheviot Hills; from them the Pennine chain of uplands extends south through the center of England, reaching its highest point in the Lake district in the northwest. To the west along the border of Wales—a land of steep hills and valleys—are the Cambrian Mountains while the Cotswolds, a range of hills in Gloucestershire, extend into the surrounding shires. The remainder of England is plain land, though not necessarily flat, with the rocky sand-topped moors in the southwest, the rolling downs in the south and southeast and the reclaimed marshes of the low-lying Fens in the east central districts. Scotland is divided into three physical regions—the Highlands, the Central Lowlands, containing two-thirds of the population, and the Southern Uplands. The western Highland coast is intersected throughout by long narrow sea-lochs or fiords. Scotland also includes the Outer and Inner Hebrides and other islands off the west coast, and the Orkney and Shetland Islands off the north coast.

Wales is generally hilly; the Snowdon range in the northern part culminates in Mt. Snowdon (3,557 ft.), highest in either England or Wales.

In addition to the numerous inlets and bays of the coast, England has a group of lakes in the northwest which includes Windermere, Coniston, Derwentwater, Ullswater and Grasmere. Important rivers flowing into the North Sea are the Thames, Humber, Tees and Tyne. In the west are the Severn and the Wye, which empty into the Bristol Channel and are navigable, as are the Mersey and Ribble. Scotland has many picturesque lakes; its most important river is the Clyde.

**Minerals.** Great Britain's most important mineral resource is coal, which was responsible to a large extent for British industrial supremacy during the late 18th and the 19th centuries. The coal mines were nationalized in 1946. Reserves have been variously estimated at from 150,000 million to 200,000 million tons. Prior to World War II, coal was exported in declining amounts to the continent, mainly to France, Sweden, Denmark and Italy. Since the war, however, exports have been negligible, and Britain has been hard put to meet her own minimum domestic requirements. Mineworkers numbered approximately 784,000 on Dec. 31, 1953.

Most of the British iron ore is produced in England, especially in Cumberland, Lancashire and Staffordshire. Tin ore and copper are obtained almost exclusively from Cornwall, while lead comes mainly from Flint, Durham and Derbyshire. Zinc occurs mainly in North Wales, the north of England, the Isle of Man and the county of Dumfries in Scotland. The whole British supply of china clay (kaolin)—of great importance in the ceramic, papermaking, bleaching and chemical industries—comes from Cornwall. Petroleum production is negligible, but oil shale exists in large quantities.

#### MINERAL PRODUCTION, 1952 and 1953 (in thousands of metric tons)

	1952	1953
Coal *	230,124	227,784
Iron ore	16,488†	16,080
Zinc (smelter)	70	74
Aluminum (smelter)	103	113
Lead (smelter)	87	76

\* Excluding No. Ireland. † 53 weeks.

**Water Power.** The most important potential sources of water power are in the highlands of Scotland, North Wales and Cumberland. Electricity generated in England, Scotland and Wales averaged 5,459,000,000 kwh. monthly in 1953. Gas manufacture averaged 1,332,000,000 cu. m. monthly in that year. Nationalization of the electric and gas industries became effective in 1948.

**Forests and Fisheries.** Great Britain was once heavily forested, but centuries of timber cutting and clearing have denuded the country of the original forests. Woodland of all types approximates 3,000,000 acres, and barely 40 per cent of Britain's surface is covered with timber. Consequently the nation is heavily dependent on imported timber.

Great Britain's sea fishing industry is among the most important in the world. The principal kinds of fish caught are herring, cod, haddock, plaice and hake, classed as wet fish, and, among shellfish, oysters, crabs and lobsters. The most important factor in the export trade is salted

herring, which ordinarily represents about 70 per cent of the total. The principal grounds frequented by British fishermen are the North Sea; off Iceland; the Faeroes; south of Ireland; west of Scotland; west of Ireland; the Irish Sea and English Channel. The catch of wet fish in 1953 was 986,012 long tons valued at £41,136,981.

*Climate.* Although Great Britain lies in the same approximate latitude as Labrador, its climate is tempered by the westerly winds blowing off the warm Gulf Stream. The sea winds also prevent excessive summer heat. Rainfall is abundant, especially in the early fall. London's famed "pea-soup" fogs occur most frequently in November and March. It has been estimated that clouds, fogs or mists obscure the sun for approximately two-thirds of the daylight hours.

The mean annual temperature of England and Wales is about 50°; the west coast is somewhat warmer than the east. January is the coldest month (average about 40°) and July the hottest (about 61.5°). Highest July temperatures usually occur around London, where the mean is somewhat above 64°. Coldest months in the capital are December (about 38°) and January (about 39°). The mean annual rainfall in London is 23½ inches.

North of Birmingham, the summers are cool, and in Edinburgh the mean temperature in July is usually below 60°. Rainfall is less than in London.

## NORTHERN IRELAND

(Part of United Kingdom)

Area: 5,238 square miles.

Population (est. June 1953): 1,384,000.

Density per square mile: 264.2.

Governor: Lord Wakehurst.

Prime Minister: Viscount Brookeborough.

Principal cities (census 1951\*): Belfast, 443,670 (capital); Londonderry, 50,099 (clothing).

Monetary unit: Pound sterling.

Language: English, Gaelic.

Religions (census 1951): Roman Catholic (34.4%), Presbyterian (29.9%), Church of Ireland (25.8%), Methodist (4.9%), others (5%).

\* Provisional figures.

Northern Ireland comprises the six predominantly Protestant counties of Antrim, Armagh, Down, Fermanagh, Londonderry and Tyrone (collectively known as Ulster), which form the northern part of the island of Ireland. The area is an integral part of the United Kingdom, but under the terms of the Government of Ireland Act (1920) it has a semi-autonomous government.

The government has only limited powers for local purposes, and many matters are reserved to the central government at Westminster. Executive authority is vested

in the Crown-appointed governor who is advised by a cabinet of eight ministers headed by the prime minister. The parliament consists of the House of Commons of 52 members elected for 5-year terms, and the Senate of 26 members elected by the House of Commons. The general elections of Oct. 22, 1953, returned 38 Unionists, 9 Nationalists and 5 representatives of other groups to the House. The area is also represented by 12 members in the British Parliament at London.

In 1950-51 there were 1,629 primary schools (up to 11 years) in Northern Ireland, with enrollment of 192,736, and 80 secondary schools, with enrollment of 29,536. Students at the Queen's University (Belfast) numbered 2,618.

Agriculture is the largest single industry; about two-thirds of the country is devoted to crops and pasture under a system of mixed farming. The leading crops include potatoes, oats and flax. In 1952 there were 940,000 cattle, 795,000 sheep and 676,000 hogs.

The two principal manufacturing industries are linen and shipbuilding, both centered in Belfast. The linen industry was established by Huguenot weavers who fled France after the revocation of the Edict of Nantes in 1685.

On Mar. 31, 1954, 16 ships of 204,760 tons were under construction at Belfast.

The topography of Northern Ireland is somewhat similar to that of the rest of the island, with two ranges (Donegal and Sperrin) and an extensive plateau (Antrim) in the northeastern part. Mineral resources are limited to deposits of basalt, clay, sandstone and granite. Fishing is an important industry, off the coast and in the numerous lakes and rivers which abound in salmon, eels and trout. Lough Neagh, covering about 153 square miles, is the largest lake in the British Isles.

The climate is comparable to that of the rest of the United Kingdom, although somewhat more equable. The highest mean summer temperature is about 59° in July, and the mean winter temperature rarely falls below 40°. Most of the comparatively light rainfall occurs in the autumn.

## ISLE OF MAN

Lieutenant Governor: Sir Ambrose Dundas.

Located in the Irish Sea, equidistant from Scotland, Ireland and England, the Isle of Man is administered according to its own laws by a government composed of the lieutenant governor (appointed by the Crown), a legislative council of 11 members, and a House of Keys of 24 elected members, one of the most ancient legislative assemblies in the world. All sitting



together constitute the court of Tynwald, which controls revenue and has executive power. Acts of the British Parliament do not affect the island unless it is named.

Agriculture and fishing are the principal industries. The island is a popular English summer resort.

### CHANNEL ISLANDS

Lieutenant Governor of Jersey: Adm. Sir Randolph Nicholson.

Lieutenant Governor of Guernsey: Air Marshal Sir Thomas Elmhirst.

This group of islands, lying in the English Channel off the northwest coast of France, is the only portion of the Duchy of Normandy belonging to the English Crown, to which it has been attached since the conquest of 1066. It was the only British possession occupied by Germany during World War II.

For purposes of government the islands are divided into Jersey (45 sq. mi.) and the bailiwick of Guernsey (24 sq. mi.), including Alderney (3 sq. mi.), Sark (2 sq. mi.), Herm and Jethou. The islands are administered according to their own laws and customs by local governments headed by Crown-appointed lieutenant governors. Acts of Parliament in London are not binding on the islands unless they are specifically mentioned.

The two main sources of income for the population are agriculture, especially stock-raising, and the tourist trade. French is still the official language, although English is the main language of commerce.

**GIBRALTAR—Status:** Colony.

Governor: Lt. Gen. Sir Gordon MacMillan.

Gibraltar, at the south end of the Iberian Peninsula, is a rocky promontory commanding the western entrance to the Mediterranean. Aside from its strategic importance, it is also a free port, naval base and coaling station. It was captured by the Arabs crossing from Africa into Spain in A.D. 711. In the 15th century it passed to the Moorish ruler of Granada and later became Spanish. It was captured by an Anglo-Dutch force in 1704 during the War of the Spanish Succession and passed to Britain by the Treaty of Utrecht in 1713. Most of the inhabitants are of Spanish, Italian and Maltese descent. There are no important industries. Gibraltar's climate is equable, with summer temperatures averaging about 84° maximum. Mean annual temperature is 64.4° and annual rainfall is about 35 inches.

**MALTA—Status:** Self-governing colony.

Capital: Valletta (population 23,316).

Governor: Major General Robert E. Laycock.

Prime Minister: G. Borg Olivier.

Foreign trade (1953): exports, £784,348

(46% to Britain); re-exports, £2,072,432 (largely fuel for ships and aircraft); imports, £20,171,506 (37% from Britain). Chief domestic export: potatoes (35%).

Agricultural products: potatoes, onions, cereals, fruits.

The Maltese islands lie between Europe and Africa, in the central channel linking the eastern and western Mediterranean. The inhabited islands are Malta (95 sq. mi.), Gozo (26 sq. mi.) and Comino (1 sq. mi.). The Knights of St. John (Malta), who obtained the islands from Charles V in 1530, reached their highest fame when they withstood an attack by superior Turkish forces in 1565. Napoleon seized Malta in 1798, but the French forces were ousted by British troops in 1799, and British rule was confirmed by the Treaty of Paris (1814). The principal importance of Malta is its strategic location as a naval base; it was heavily attacked by German and Italian aircraft during World War II but was never invaded by the Axis. Most of the population are Maltese, speaking the Phoenician Maltese language, a tongue akin to Syriac and Arabic. The islands are densely populated (2,649 per sq. mi. in 1954).

Under its 1947 constitution, Malta enjoys a measure of self-government. The locally-elected assembly has complete control over domestic affairs, but the British government keeps control over matters dealing with defense and foreign affairs.

The climate is temperate and healthful. Annual mean temperature is 64.5°, with June-September the hottest months and December-February the coldest (56°). Rainfall is irregular, averaging about 20 inches annually.

## AFRICA

ANGLO-EGYPTIAN      SUDAN      (See EGYPT).

### BRITISH SOUTH AFRICAN PROTECTORATES

High Commissioner: Sir John Le Rougetel.

The three British protectorates in southern Africa—Basutoland, Bechuanaland and Swaziland—are not part of the Union of South Africa, but are administered by a High Commissioner responsible to the Secretary of State for Commonwealth Relations in the British cabinet. He also holds the office of High Commissioner for the United Kingdom in the Union of South Africa.

**BASUTOLAND—Status:** Protectorate.

Capital: Maseru (population 3,383).

Resident Commissioner: E. P. Arrow-smith.

Foreign trade (1952): exports, £2,155,974;



Imports, £2,584,373. Chief exports: wool, mohair.

Agricultural products: corn, wheat, sorghum.

Basutoland is a mountainous enclave surrounded by the Union of South Africa and bounded by the Orange Free State, Cape Province and Natal. It was constituted a native state under British protection by a treaty signed with the native chief Moshesh in 1843. It was annexed to Cape Colony in 1871, but on Mar. 13, 1884, was restored to direct control by the Crown. The resident commissioner is advised by a council of 100, of whom 95 are nominated by the native chiefs who administer the affairs of their tribes.

The population is restricted almost entirely to the lowland strip in the west; the white population (1,676 by the last census, in 1946) consists solely of officials, missionaries, traders and a few labor agents for employers in the Union of South Africa. About 100,000 natives are regularly employed in the Union. Sheep raising is highly developed. Land is the common property of the nation, held in trust by the chiefs. There are no European farmers.

The climate is dry and variable; temperatures range from 11° to 93°. Rainfall also is variable, but is heaviest during the summer; it averages about 30 inches annually.

**BECHUANALAND—Status: Protectorate.** Capital: Mafeking, in Cape Province (population 4,666).

Resident Commissioner: W. F. Mackenzie. Foreign trade (1952): exports, £2,058,702; imports, £1,875,294. Chief export: pastoral products.

Agricultural products: hides and skins, cattle, butter, millet, maize.

Minerals: gold and silver.

Bechuanaland lies in south central Africa, bounded on the south and southeast by the Union of South Africa, on the west by South-West Africa, on the north by Angola and Northern Rhodesia and on the northeast by Southern Rhodesia. Its average elevation is 3,300 feet and the greater part is gently undulating. The area was placed under British protection on Sept. 30, 1885, to prevent further Boer encroachment and has since remained a British protectorate. The form of government is similar to that of Basutoland.

Most of the inhabitants are Bantu, but there were 2,325 Europeans in 1946, a few of them farmers. The country is essentially pastoral, with cattle raising and dairy farming the chief industries. Gold is mined in the Tati district near Francistown. There is also some mining of silver and copper. Timber is produced for use as fuel and pit props.

The summers are intensely hot; winters (May-August) are pleasant. Rainfall occurs mostly between December and May, and averages about 18 inches annually.

**SWAZILAND—Status: Protectorate.**

Capital: Mbabane (population 1,600).

Resident Commissioner: D. L. Morgan.

Foreign trade (1951): exports, £2,639,765; imports, £1,878,984. Chief exports: cattle, asbestos.

Agricultural products: cattle, hides and skins, butter, tobacco, corn, millet.

Minerals: asbestos, tin, gold.

Swaziland lies at the southeastern corner of the Transvaal. It is largely hilly, with an average elevation of 4,000 feet in the west. It came under the protection of the Transvaal Republic in 1894 but was made a British protectorate in 1906 under the high commissioner for South Africa.

The natives are mostly Swazi; there were 3,204 Europeans in 1946, mostly farmers. Grazing is the principal native occupation; there is excellent pasture in the high land to the west. Tropical and subtropical crops are raised in the lower areas. Tin is mined near Mbabane.

Rainfall is moderate throughout the protectorate (about 20 inches a year) and is heaviest in summer. Average temperature ranges from about 65° in July to 80° or more in January.

## EAST AFRICA HIGH COMMISSION

The East Africa High Commission, comprising the governors of Kenya, Tanganyika and Uganda, administers the public utilities and other central services of those territories, and has power to legislate with respect thereto with the advice and consent of a central legislative assembly. The governments of the three areas are otherwise independent of one another.

**KENYA—Status: Colony and protectorate.**

Capital: Nairobi (pop. 1948: 119,489).

Governor: Sir Evelyn Baring.

Foreign trade (1953)\*: domestic exports, £19,521,300; re-exports, £3,416,769; imports, £51,718,169. Chief exports: coffee (34%), sisal (13%), tea, gold.

Agricultural products: coffee (exports 1953: 14,790 long tons); sisal (exports 1953: 35,334 tons); tea (exports 1953: 2,996 tons); pyrethrum, sugar cane.

Minerals: gold (exports 1953: 11,582 oz.), sodium carbonate, silver, salt.

Forest products: wattle bark and extract, timber.

\* Import and re-export figures exclude outward transfers of imported goods to Tanganyika and Uganda.

Kenya extends along the Indian Ocean between Ethiopia and Tanganyika Territory and westward to Lake Victoria and Uganda. Formerly known as the East Africa Protectorate, it was held under a concession from the Sultan of Zanzibar by the Imperial British East Africa Company from 1888 to 1905. It became a Crown colony in 1920, the coastal strip leased from the Sultan becoming a protectorate.

The colony is predominantly agricultural, and a large area is cultivated by Europeans. Altitude ranges from sea level to more than 9,000 ft.; hence, the cultivation of tropical, subtropical and temperate crops is possible. Non-natives (1952) included more than 40,000 Europeans and 150,000 Asiatics.

Kenya has been plagued since 1952 by serious outbreaks of native terrorism inspired by the anti-white Mau Mau secret society, which have taxed strengthened security forces, including British regular army units.

The coastal zone of Kenya is hot and humid; February to April are the hottest months, with a mean temperature of 82° at Mombasa. June and July are coolest (76° at Mombasa). The yearly average rainfall is about 48 inches. In the interior highlands the climate is temperate, and the rainfall comparatively heavy. Yearly average temperatures at Nairobi are 60° to 66°.

**TANGANYIKA TERRITORY—Status:** U. N. trust territory.

**Capital:** Dar es Salaam (pop. 1948: 69,-227).

**Governor:** Sir Edward F. Twining.  
Foreign trade (1953)\*: domestic exports, £34,545,405; re-exports, £1,398,986; imports, £28,427,355. Chief exports: sisal (37%), coffee (17%), cotton, diamonds.

**Agricultural products:** sisal (exports 1953: 171,135 long tons); coffee (exports 1953: 15,240 tons); cotton (exports 1953: 14,035 tons); peanuts, sugar cane, tea.

**Minerals (exports 1953):** gold, 69,886 fine oz.; diamonds, 170,679 carats.

**Forest products:** gum arabic and copal, beeswax, timber.

\* Import and re-export figures exclude outward transfers of imported goods to Kenya and Uganda.

Tanganyika Territory, with the Belgian Ruanda and Urundi, constituted German East Africa from 1884 until 1919. It was administered under League of Nations mandate by Britain until 1946, when it was placed under United Nations trusteeship, with Great Britain as the administering power.

Tanganyika's narrow coastal plain is bordered on the west by the precipitous eastern side of the Central African plateau. Mount Kilimanjaro (19,565 ft.) is the highest point on the African continent. The territory also includes adjacent islands in the Indian Ocean.

The territory is sparsely populated; two-thirds of the area is uninhabited. In 1952 there were 17,885 Europeans and 69,-524 Indians and Arabs. It is the world's largest producer of sisal hemp. Most of the hemp, which is of the highest grade, is grown in the drier parts of the coast belt under European supervision. Stock raising is also important, but its progress is hampered by prevalence of the tsetse fly.

The climate generally is hot and humid

on the coastal areas, with the temperature averaging 80° at Dar es Salaam. Rainfall in the capital averages 60 inches. Inland the rainfall and temperature are lower.

**UGANDA—Status:** Protectorate.

**Capital:** Entebbe (population 7,321).

**Governor:** Sir Andrew Cohen.

**Foreign trade (1953)\*:** domestic exports, £33,378,662; re-exports, £257,704; imports, £28,427,355. Chief exports: cotton lint (49%), coffee (35%).

**Agricultural products:** cotton (exports 1953: 59,670 long tons); coffee (exports 1953: 35,680 long tons); sugar cane, rubber, tea, sisal.

**Minerals:** gold, tin.

\* Import and re-export figures exclude outward transfers of imported goods to Kenya and Tanganyika.

Uganda lies immediately south of Anglo-Egyptian Sudan and west of Kenya, along the northwest shore of Lake Victoria. The surface is extremely diversified, with lofty plateaus, snow-capped peaks, swamps, forests and arid areas. A British protectorate over the area was proclaimed in 1894. A large measure of home rule is given the native states, notably Buganda, whose *kabaka* (king) is assisted by a ministry and native parliament.

Agriculture, including livestock, is the basis of the economy. Cotton is raised, principally by natives, and coffee, tea and rubber are grown on large plantations. Most natives possess large herds of cattle and sheep. In 1948 there were 7,600 Europeans and 37,450 Asiatics.

Like the topography, the climate is extremely variable. At Entebbe, the mean temperature is about 70°, and rainfall is about 58 inches annually.

**GAMBIA—Status:** Colony and protectorate.

**Capital:** Bathurst (population 19,602).

**Governor:** Sir Percy Wyn Harris.

**Foreign trade (1953):** exports, £2,860,-596; imports, £2,219,203. Chief export: peanuts (86%).

**Agricultural products:** peanuts, hides and skins, millet, rice, palm kernels.

Gambia, smallest of the British West African dependencies, is a stretch of land 200 miles long on both sides of the lower Gambia River, surrounded on all land sides by French West Africa and fronting on the Atlantic Ocean. During the 17th century it was settled by various companies of English merchants; slavery was the chief source of revenue until it was abolished in 1807. Gambia became a Crown colony in 1843. Except for the island of St. Mary, on which the capital stands, the area is administered as a protectorate.

The inhabitants, mostly Negroes or Negroids, are predominantly Mohammedan. The principal economic activity is the cultivation of peanuts. Internal transportation is by steamer and launch. Temper-



atures are fairly regular throughout the year, ranging from about 60° to 85°. Maximum rainfall is in August and September; it averages 50 inches or more annually.

**GOLD COAST—Status:** Colonies (Gold Coast Colony, 23,937 square miles; Ashanti, 24,379 square miles); protectorate (Northern Territories, 30,486 square miles); U. N. trust territory (Togoland, 13,041 square miles).

Capital: Accra (population 135,456).

Governor: Sir Charles Arden-Clarke.

Prime Minister: Kwame Nkrumah.

Foreign trade (1953): exports, £90,240,-000; imports, £73,980,000. Chief exports: cacao, gold, manganese ore.

Agricultural products: cacao (1952-53: 247,500 long tons), copra, palm kernels.

Mineral exports (1953): gold (730,200 oz.), manganese ore (744,000 long tons), diamonds (2,165,400 carats).

Early a center of the slave trade and of Anglo-Dutch rivalry, the Gold Coast, stretching along the Gulf of Guinea for 370 miles, became a British possession in 1871. Ashanti, in the interior, became a protectorate in 1896 and was annexed in 1901. The Northern Territories, to the north of Ashanti, were made a protectorate in 1901. Under the 1951 constitution, which gave the colony greater responsibility in its own affairs than any other British colony in Africa, the Gold Coast is administered by a governor with a cabinet headed by a prime minister and a legislative assembly of 84 (75 are Africans). Togoland, formerly German, was divided into French and British spheres and placed under League of Nations mandate after World War I, and under U. N. trusteeship in 1946.

Except for 6,773 non-Africans (1948), the population is all Negro. The main native industry is the cultivation of cacao, in the production of which the colony leads the world. The climate on the coast is hot and humid, ranging on the average from 78° to 80°. Rainfall is about 27 inches annually at Accra.

**KENYA (See EAST AFRICA HIGH COMMISSION)**

**MAURITIUS—Status:** Colony.

Capital: Port Louis (population 79,084).

Governor: Sir Robert Scott.

Foreign trade (1953): exports (including re-exports), 274,165,096 rupees (60% to Britain); imports, 251,093,755 rupees (38% from Britain). Chief export: sugar (96%).

Agricultural products: sugar (1953: 512,-000 metric tons), copra, tobacco.

Mauritius is a mountainous island of volcanic origin in the Indian Ocean, about 500 miles east of Madagascar. It was seized in 1810 from the French, who had settled it in 1715, and was formally ceded to Great Britain by the Treaty of Paris in 1814.

With over 600 persons per square mile, the island is one of the most densely populated regions in the world. The popula-

tion has a large white element, chiefly French and British, but British Indians are predominant. There are many half-castes. The leading industry is sugar cultivation.

The climate is pleasant during the cool season, but extremely hot from December to April (90° to 96° at Port Louis). During this period there are also frequent torrents of rain and occasional severe cyclones.

**NIGERIA—Status:** Colony and protectorate.

Governor: Sir John S. Macpherson.

Principal cities (est. 1948): Ibadan, 335,-000 (native metropolis); Lagos, 230,000 (capital); Kano, 100,000 (textiles, leather goods, cattle).

Monetary unit: Nigerian pound.

Languages: Native tongues, Arabic, English.

Religions: Mohammedan, Pagan, Christian.

Nigeria, with an area twice that of California, is situated on the Gulf of Guinea in West Africa. It was visited by European traders and explorers in the 16th and 17th centuries, and by the end of the 18th century British operators had a virtual monopoly in the area. Between 1879 and 1914, a series of private colonial developments by the British, together with reorganizations of the Crown's interest in the region, resulted in the formation of Nigeria as it exists today. During World War I, native troops of the West African frontier force joined with French forces to defeat the German garrison in the Cameroons. The Cameroons, a narrow strip along Nigeria's eastern border, became a League mandate after World War I, divided between France and Britain. Today the British Cameroons, a U. N. trust territory, is attached to Nigeria for administrative purposes.

The governor of Nigeria, named by the British Crown, heads the administration of the colony, which (including the Cameroons) is divided into four sections, each composed of several provinces. Under the 1951 constitution, each of the three regions of Nigeria proper has an elected legislative assembly, which in turn elects the members of the central legislature. There are also regional and central legislative councils.

The vast majority of the population is Negro, although in the north there has been an admixture caused by invasions of Fula, Berber and Arab or Arabized people. Mohammedanism is the dominant religion.

Most of the people are agriculturists. The staple food crops are durra (guinea corn), millet, yams, bananas and maize. Among the leading export crops are cacao (1953 exports: 104,640 long tons), peanuts (decorticated) (326,400 tons), palm kernels (403,000 tons), palm oil (200,000 tons) and rubber (21,600 tons). Hides and skins are also important export items.



Aside from small native industry, there is no manufacturing.

Most external trade is with Britain. Chief exports are cacao, peanuts, palm kernels and oil and tin concentrates. Exports in 1953 totaled £125,300,000; imports, £108,000,000.

There is a substantial internal trade; Kano is a busy terminal for caravan routes. The Niger and several other rivers are navigable; otherwise, the 1,901 miles of railway are the chief means of transportation. Highway mileage totals about 21,000. The main ports, except Lagos, are on rivers. Air service is supplied by BOAC, Air France and other international lines.

Nigeria is a leading tin producer—9,300 short tons in 1953—from mines on the Bauchi plateau. Other minerals are coal, gold, lead, silver and tungsten. Over half the area is forested, but forest resources are comparatively unexploited. Mahogany is the main timber export.

All of Nigeria lies within the tropics, but the climate varies from tropical in the south to near temperate on some parts of the plateau. In the south the temperature varies between 70° and 100°, and averages upwards of 80°. Rainfall there is over 100 inches a year.

## FEDERATION OF RHODESIA AND NYASALAND

Governor General: Lord Llewellyn.  
Prime Minister: Sir Godfrey Huggins.

This is a federation of three British central African territories—Northern Rhodesia, Nyasaland and Southern Rhodesia. The federation embraces a block of territory (about 489,100 sq. mi.) extending southward for about 1,000 mi. from Tanganyika and the Belgian Congo to Bechuanaland and the Union of South Africa.

The federation came into existence on Oct. 23, 1953, when its constitution took effect. The government is headed by the crown-appointed governor general, who is advised by a council of ministers headed by the prime minister. Legislative authority is vested in the federal assembly of 35 members, 17 from Southern Rhodesia, 11 from Northern Rhodesia and 7 from Nyasaland. Of these, 9 members (6 Africans and 3 Europeans) are specially elected or appointed to represent African interests. The federal government has exclusive control of several matters, including foreign affairs, defense, immigration, foreign trade, currency, transport and postal service.

The first general election for the assembly took place on Dec. 15, 1953, and the first assembly convened on Feb. 2, 1954.

**NORTHERN RHODESIA**—Status: Protectorate.

Capital: Lusaka (European population, 7,200).

Governor: A. E. Trevor Benson.

Foreign trade (1953): exports, £93,744,236 (61% to Britain); re-exports, £1,090,944; imports, £51,832,830 (36% from Britain). Chief export: copper (92%).

Agricultural products: tobacco, maize, wheat.

Minerals: copper (1953: 362,581 long tons), cobalt, vanadium, lead, zinc.

Northern Rhodesia is in south central Africa. Much of the country consists of high plateau, with the Congo-Zambezi watershed rising in places to 5,000 feet. Rhodesia was assigned in 1889 to the British South Africa Company, headed by Cecil Rhodes. Administrative control was transferred to the Crown on Apr. 1, 1924.

Native tribes number from 50 to 60; there were 50,000 Europeans in 1953. More than 3,000,000 acres are owned and occupied by Europeans. Metals constitute almost all exports by value. Lead and zinc deposits occur at Broken Hill; copper at Bwana M'Kuba. The main line of the Rhodesian railway crosses the northern part of the colony from Livingstone to the Congo border. A number of rivers are navigable.

Average temperature in the south ranges from about 65° in July to 80° or more in October. The rainfall occurs principally between November and April; it varies widely in different parts of the protectorate.

**NYASALAND**—Status: Protectorate.  
Capital: Zomba (pop. 1949: 7,526).  
Governor: Sir Geoffrey F. T. Colby.

Foreign trade (1952): exports and re-exports, £6,301,225; imports, £8,771,631. Chief exports: tobacco (34%), tea (30%).

Agricultural products: tobacco (exports 1953: 12,960 short tons), tea, cotton.

Nyasaland, a British protectorate since 1891, is a narrow area lying between Mozambique, Northern Rhodesia and Tanganyika Territory along the southern and western shores of Lake Nyasa. Agriculture is the chief occupation, both of the European settlers and natives. Europeans numbered 4,073 in 1952.

The climate is extremely humid along the shores of Lake Nyasa, although the temperature rarely rises above 95°. In the highlands, above 3,000 feet, average temperatures are considerably lower. The dry season, from May to September, is comparatively cool. Annual rainfall is about 35 inches in the lowlands and 50 inches in the highlands.

**SOUTHERN RHODESIA**—Status: Self-governing colony.

Capital: Salisbury (population: 61,760).  
Governor: Vice Adm. Sir Peverill William-Powlett.

Prime Minister: R. S. Garfield Todd.  
Foreign trade (1953): exports, £53,955,323 (35% to Britain); re-exports, £11,483,629; imports, £77,677,588 (50% from Britain). Chief exports: tobacco (33%), asbestos, gold, chrome ore.

**Agricultural products:** tobacco (1953: 105,996,056 lb.), corn, peanuts, meat, hides and skins.

**Minerals** (1953): asbestos (87,739 short tons), gold (501,057 fine oz.), coal (2,886,433 tons), chrome ore (463,030 tons).

Southern Rhodesia is separated from Northern Rhodesia by the Zambezi River.

The country was settled in 1890 by the British South Africa Company, led by Cecil Rhodes. With the expiration of the company's charter, the white residents voted (1922) in favor of a responsible government of their own, and on Sept. 12, 1923, the country was annexed to Britain.

Southern Rhodesia has responsible government and a popularly elected Legislative Assembly of 30 members, but control of foreign relations and certain other matters is reserved to the federal government.

Most of the inhabitants are natives, but the country is well-adapted to European settlers, who in mid-1953 numbered 158,500. In addition, there were 11,400 Asiatics and half-castes. Mining is the basis of the economy. Farming ranges from ranching to tobacco growing, but mixed farming is becoming more common. Conditions for cattle raising and dairy farming are especially favorable. Manufacturing is of growing importance, with the factories producing goods valued at £55,556,813 in 1952. The colony is well served with railways (1,361 mi.), roads (4,000 mi.) and airlines.

The hottest month is October (mean maximum 85.2°); the coolest are June, July and August, when frost is likely to occur. Generally the days are hot throughout the year, and the nights are frequently cool. Rainfall, averaging 28 inches annually, is greatest in October to December.

**ST. HELENA—Status:** Colony.

**Capital:** Jamestown (population 1,547).

**Governor:** James D. Harford.

**Foreign trade** (1953): exports, £82,858 (98% to Britain); imports, £209,507 (68% from Britain). **Chief export:** hempen products (99%).

**Agricultural products:** flax, potatoes.

St. Helena is a volcanic island (47 sq. mi.) in the South Atlantic about 1,200 miles from the west coast of Africa. It is famous as the place of exile of Napoleon (1815–21). It was taken for Britain in 1651 by the British East India Company and became a Crown colony in 1833. Attached to it are Ascension Island (34 sq. mi.), 800 miles northwest, and the Tristan da Cunha group (45 sq. mi.), about 1,500 miles southwest. Most of the inhabitants are of mixed European, East Indian and African descent. Ascension was an Allied air base in World War II.

Although St. Helena is in the tropical zone, its climate is temperate and health-

ful; the temperature varies from 68° to 84° in summer and 57° to 90° in winter. Rainfall is extremely variable.

**SEYCHELLES—Status:** Colony.

**Capital:** Victoria (population 9,497).

**Governor:** William Addis.

**Foreign trade** (1952): exports (domestic), 7,506,737 rupees; imports, 8,324,257 rupees. **Chief export:** copra (69%).

**Agricultural products:** cinnamon, patchouli oil, coconuts, maize, sugar cane.

This archipelago of about 92 islands in the Indian Ocean was seized from France by British troops in 1794 and was ceded to Great Britain by the Treaty of Paris in 1814. The principal island is Mahé (55 sq. mi.), about 600 miles northeast of Madagascar. The climate is temperate.

**SIERRA LEONE—Status:** Colony and protectorate.

**Capital:** Freetown (population: 64,576).

**Governor:** Sir Robert Hall.

**Foreign trade** (1953): exports, £11,977,113; imports, £11,096,423. **Chief exports:** iron ore (36%), palm kernels (36%), diamonds, kola nuts.

**Agricultural products:** palm kernels and oil, rice, millet, cassava, rubber.

**Minerals** (exports 1953): iron ore (1,200,240 long tons), diamonds (416,742 carats), gold (3,585 troy oz.).

**Forest products:** palm kernels, plassava.

Sierra Leone lies on Africa's west coast between French Guinea and Liberia. It is a well-watered hilly country but has a low swampy coastland with an extremely unhealthy climate. The coastal area (colony proper) was ceded to English settlers in 1788 as a home for Negroes discharged from the British armed forces and also for runaway slaves who had found asylum in London. The British protectorate over the hinterland was proclaimed in 1896. It was not until 1928 that slavery was totally abolished in the protectorate. Under the 1951 constitution there is a legislative council of 30 members, of whom 21 are elected directly or indirectly.

Freetown is the best harbor on the west coast.

**SOMALILAND—Status:** Protectorate.

**Administrative center:** Hargeisa (population 17,500).

**Governor:** Theodore O. Pike.

**Foreign trade** (1953): exports, £1,032,000; imports, £1,824,000. **Chief export:** hides and skins.

**Agricultural products:** cattle, hides and skins, grains.

**Forest products:** gums and resins.

British Somaliland extends along the Gulf of Aden for about 400 miles and inland for 80 to 220 miles. The interior is an elevated plateau falling in steep escarpments to the coastal plain. It came under Egyptian influence in 1875, but during the years 1884–86 treaties guaranteeing British protection were signed with the various



Somali chiefs. Italian troops occupied the protectorate in 1940, but it was retaken by British troops in 1941. Both executive and legislative power is exercised by the governor.

Most of the inhabitants are nomadic Somalis of Mohammedan faith. Their principal activity is stock raising. The climate is extremely hot and arid, with rainfall in the coastal areas averaging less than 8 inches. The average temperature at Berbera, on the coast, is 77° in January and about 98° in July.

#### **SOUTH-WEST AFRICA (See UNION OF SOUTH AFRICA)**

#### **SWAZILAND (See BRITISH SOUTH AFRICAN PROTECTORATES)**

#### **TANGANYIKA & UGANDA (See EAST AFRICA HIGH COMMISSION)**

## **Union of South Africa**

(Member of Commonwealth of Nations)

Area: 472,550 square miles.\*

Population (est. 1953): 13,153,000\* (European, 21.0%; Bantu, 67.5%; mixed, 8.2%; Asiatic, 3.3%).

Density per square mile: 27.8.\*

Ruler: Queen Elizabeth II.

Governor General: Ernest G. Jansen.

Prime Minister: Daniel F. Malan.

Principal cities (census 1951): Johannesburg, 880,014 (gold, industrial center); Capetown, 571,638 (seat of legislature, seaport); Durban, 475,026 (seaport); Pretoria, 283,148 (seat of administration); Port Elizabeth, 188,617 (seaport).

Monetary unit: South African pound (£SA).

Languages: English, Afrikaans.

Religions (European pop., 1946): Dutch Reformed Churches, 55%; Anglican Church, 19%; Methodist, 6%; Presbyterian, 5%; Roman Catholic, 5%; others 10%.

\* Excluding South-West Africa.

**HISTORY.** After the discovery of the Cape of Good Hope in 1488 by Bartholomeu Diaz, the Dutch sent the first colonists to the area in 1652. The British seized the territory in 1814 near the close of the Napoleonic wars, when Holland was France's ally. In protest against the British rule, thousands of Boers, settlers of Dutch descent, trekked northward between 1835 and 1838 and set up the republics of Orange Free State and Transvaal, subsequently recognized by the British.

The discovery of gold in Transvaal in 1886 brought an influx of English and other foreigners. British demands that these immigrants be enfranchised by the Transvaal government precipitated the South African War of 1899-1902, won by the British. By the Treaty of Vereeniging (May 31, 1902) the Boers renounced the independence of Transvaal and Orange Free State. In 1910, Cape Colony, Trans-

vaal, Natal and the Orange Free State were set up as the Union of South Africa, with dominion status and with Louis Botha, a former Boer general, as the first prime minister. During World War I, South African forces seized German South-West Africa, over which the Union later received a mandate by the Treaty of Versailles.

When World War II broke out, there was considerable pro-German and anti-British feeling in South Africa. The country went to war against the Axis, however, under the leadership of Prime Minister Jan C. Smuts.

In the elections of May, 1948, Smuts' United party was defeated by a Nationalist-Afrikaner coalition, which favored strict racial segregation. Enforcement of this policy has led to severe racial disturbances and unrest and a prolonged constitutional crisis. The National party (merged with the Afrikaner party in 1951) was continued in office in the April 1953 elections.

**GOVERNMENT AND DEFENSE.** The Union, as a self-governing nation, has its own legislature, a Senate of forty-eight members elected for ten years, and a House of Assembly of 159 members elected for five years. All legislators must be Union nationals of European descent, and suffrage is virtually limited to whites. The Queen is represented by a governor general named by her after consultation with the Union. He can summon or dissolve the Senate and House, but a general election must be held at least once every five years.

In parliamentary elections held April 15, 1953, the National party won 94 seats, United party 57 and Labour party 5. Three seats are held by representatives of natives.

Political considerations made the draft inexpedient in World War II, and all members of the armed forces were volunteers. The postwar strength of the defense forces is fixed as follows: army, 4,640; air force, 3,319; navy, 863; a total strength of 8,822 as opposed to 5,549 in the prewar establishment. The navy, only slightly expanded in World War II, has 60 small vessels.

**SOCIAL AND ECONOMIC CONDITIONS.** *Education.* Education for white Children is compulsory from 7-16. Primary education is free and, except for vocational schools and the 9 universities, all education is under provincial control.

In 1950 there were 2,756 state and state-aided primary and secondary schools for European scholars, who numbered 470,797, and 6,790 non-European schools with enrollment of 1,018,084. The 9 universities had 17,665 full-time students in 1950.

The official languages are English and Afrikaans. The latter, derived from 17th-century Dutch, is taught in almost all the schools. About 70 per cent of the popula-



tion over 7 years old understands both languages. European and Asiatic immigration is strictly controlled.

**Agriculture.** South Africa is predominantly a pastoral country, with less than 15 per cent of its area considered arable. Sheep and cattle raising are the principal occupations, especially in the high veldt. Wool production in 1953 was estimated at 265,000,000 lbs. In 1951 there were 34,823,000 sheep, 11,565,000 cattle and 681,000 hogs.

Climate and differences in terrain combine to give a great variety of agricultural products. The staple crop is maize, grown widely with a production varying from 1½ to 3 million tons annually. In southwest Cape Province, products of the Mediterranean type predominate, while in the coastal belt of Natal and in northern Transvaal, subtropical crops, especially sugar, are grown.

Production of leading crops in 1952-53 was as follows: maize, 3,016,000 metric tons; wheat, 535,000 tons; tobacco, 17,200 tons; sugar, 597,000 tons.

**Manufacturing and trade.** Food, beverages and tobacco, and metal products are leading products. As a result of the need for armaments in World War II, the Union's manufacturing is no longer mainly devoted to agricultural processing. A wartime iron and steel industry was established, and cement, chemical, textile and auto assembly plants were expanded. Steel production (1953) was 1,300,000 metric tons; that of pig iron, 1,223,000 tons. The major industrial area is southern Transvaal.

Trade statistics (in millions of South African pounds):

	1951	1952	1953
Exports*	345.8	336.3	335.2
Re-exports†	32.5	46.7	40.4
Imports	470.0	418.9	425.4

\* Excluding gold bullion. † Included in export total.

Chief customers in 1953 were Britain (30%), France (12%) and the U. S. (6%); the principal suppliers, Britain (38%), the U. S. (18%) and France (17%). Chief exports in 1952 (besides gold bullion valued at £SA94,500,000) were wool (20%), semi-processed gold (14%) and diamonds (9%). Principal imports included textiles, farm and industrial machinery, motor vehicles and petroleum products.

**Communications.** The well-organized railway system, mostly Union-controlled, totaled 13,942 miles in 1950. Roads suitable for motor traffic amounted to 100,000 miles.

**Finance.** Recent data are as follows (in millions of South African pounds):

	1951-52	1952-53	1953-54*
Revenue	227.0	255.1	282.6
Expenditure	270.6	297.7	326.9

\* Preliminary.

The gross public debt of the Union on Jan. 31, 1954, was £SA885,000,000, of which £SA50,600,000 was external. Notes in circulation on Mar. 31, 1954, totaled £SA91,800,000; the gold reserve was U. S. \$180,000,000.

#### NATURAL FEATURES AND RESOURCES;

**CLIMATE.** The Union has a high interior plateau, or veldt, nearly half of which averages 4,000 feet in elevation. There are no important mountain ranges, although the Great Escarpment, separating the veldt from the coastal plain, rises to over 10,000 feet. The principal river is the Orange, rising in Basutoland and flowing westward for 1,300 miles through the Union's center to the Atlantic.

Extensive mineral resources account for the economic prosperity. The Union is the world's leading gold producer. Diamond production is now surpassed in importance by coal. Mineral production for 1953 included gold, 11,940,616 oz.; coal, 30,569,655 short tons; copper, 37,584 tons; diamonds, 2,627,411 carats; iron ore, 2,140,000 tons; (1952) manganese ore, 962,000 tons; platinum, 238,660 oz.; chromite, 640,000 tons; asbestos, 133,600 tons; antimony, 7,285 tons. Gypsum, tin and tungsten also are mined, and uranium deposits have been reported.

The whaling industry, centered at Durban on the east coast, produces considerable amounts of whale oil. The Union has extensive fishery resources along the 1,500 miles of coast line. Annual trawler catch of edible fish is about 95,000,000 pounds.

Except for the western semi-arid regions, the climate is generally subtropical, much like that of northern Florida. Rainfall averages about 40 inches a year on the east coast and decreases sharply westward. The mean annual temperature is remarkably uniform; at Johannesburg it is 60.6°, with January the hottest month. Most of the rainfall occurs from October to March.

#### SOUTH-WEST AFRICA—Status: Mandate.

Administrator: Daniel du P. Viljoen.

Capital: Windhoek (population 23,359).

Foreign trade (1952)\*: exports, £SA35,495,038; imports, £SA20,149,928. Chief exports: karakul skins, butter, slaughter animals, diamonds.

**Agricultural products:** hides and skins, butter, corn, wheat.

**Minerals:** diamonds (1952: 537,450 carats), vanadium concentrates, tungsten, lead, tin, iron ore, copper.

\* Includes trade with Union of South Africa.

The mandate, bounded on the north by Angola, and on the east by Bechuanaland and the Union of South Africa, was discovered by the Portuguese explorer Diaz in the late 15th century. It is for the most part a portion of the high plateau of South Africa with a general elevation of from 3,000 to 4,000 feet. It became a German

colony in 1884 but was conquered by South African forces in 1915, becoming a Union mandate by the terms of the Treaty of Versailles. The Union of South Africa's application for incorporation of the territory into the Union was rejected by the United Nations assembly on Dec. 14, 1946, and the Union was invited to prepare a trusteeship agreement instead. By a law passed in April, 1949, however, the territory was brought into much closer association with the Union—including representation in the Union Parliament.

The country in general is better suited to grazing than to the raising of crops because of the light rainfall. The karakul sheep industry is particularly well-developed; in 1952, 2,503,925 pelts were exported. The Union accounts for almost all the imports and about 40 per cent of the exports. The principal port is Walvis Bay.

#### **ZANZIBAR—Status: Protectorate.**

Capital: Zanzibar (population 60,000).

Sultan: Seyyid Sir Khalifa bin Harub.

British Resident: Sir John Rankine.

Foreign trade (1953): exports, £7,171,549; re-exports, £795,839; imports, £5,939,861. Chief export: cloves (84%).

Agricultural products: cloves (1953: 31,700,550 lb.), copra, coconut oil, sisal.

The protectorate consists principally of the islands of Zanzibar (640 sq. mi.) and Pemba (380 sq. mi.), just off the East African coast. Before 1890, the sultanate's territory also included a large area on the mainland, now comprising Italian Somaliland, Kenya and Tanganyika Territory. It was proclaimed a British protectorate Nov. 4, 1890. The British resident administers the government, but the sultan still retains considerable authority.

The principal industry is the production of cloves—80 per cent of the world supply.

The climate is excessively hot and moist, with a mean annual temperature of 80.5°. June to September is the coolest season. Annual rainfall is about 60 inches.

## **WESTERN HEMISPHERE**

#### **BAHAMAS—Status: Colony.**

Capital: Nassau (population 36,246).

Governor: Earl of Ranfurly.

Foreign trade (1953): exports (including re-exports), £1,390,284 (49% to the U. S.); imports, £8,812,564 (45% from the U. S.). Chief exports: lumber, salt, crawfish.

Agricultural products: tomatoes, citrus fruit, sisal.

Sea products: sponges, lobsters, crawfish.

The Bahamas are an archipelago of about 3,000 islands, islets (cays) and rocks, east of Florida and north of Cuba, extending from N.W. to S.E. for about 800 miles. Only about 20 of the islands are inhabited; the most important is New Providence

(20 sq. mi.) on which Nassau is located. The islands were reached by Columbus in Oct., 1492, and were a favorite pirate resort in the early 18th century. They have been a Crown colony since 1717. The constitution provides for a nominated Legislative Council and a popularly elected Assembly. The governor is advised by an Executive Council.

About 87 per cent of the population is Negro. The tourist trade is of paramount importance, especially at Nassau, which is a favorite winter resort. The climate is exceptionally agreeable, with mean temperatures ranging from 60° (January to March) to 88° (June to September). The rainy season is May through October; annual average fall at Nassau is 18 inches. Hurricanes occur usually from July to October.

#### **BARBADOS—Status: Colony.**

Capital: Bridgetown (population 13,345).

Governor: Sir Robert Arundell.

Prime Minister: Grantley H. Adams.

Foreign trade (1953): exports, BWI\$41,135,901 (73% to Britain); imports, BWI\$45,524,335 (41% from Britain). Chief exports: sugar (66%), molasses, rum.

Agricultural products: sugar (1952: 160,750 long tons), cotton.

Manufactures: rum (1951: 1,775,624 wine gal.), molasses (23,077 long tons).

Barbados, an island east of the Windward group in the West Indies, has been a British possession since 1627; it is believed to have been first visited by the Portuguese. The colony has a nominated Legislative Council and a popularly elected Assembly of 24 members. Under a ministerial system of government inaugurated Feb. 1, 1954, the prime minister and 4 other members of the executive committee (all 5 being members of the Assembly) exercise executive responsibility for most of the departments of government, except defense and foreign affairs.

The island is very densely populated (about 1,295 per sq. mi.). About 70 per cent of the inhabitants are Negro, 7 per cent white and the remainder of mixed blood. Approximately 70 per cent of the total area is cultivated and half of this is devoted to sugar, which is the staple product; there are sugar and molasses plants and several rum distilleries.

Barbados has an agreeable climate, with temperatures that range between 70° and 86°, rarely below 65°. The cold season (December through May) is also the dry season; average annual rainfall is 60 inches, with September the wettest month.

#### **BERMUDAS—Status: Colony.**

Capital: Hamilton (population 3,500).

Governor: Lt. Gen. Sir Alexander Hood.

Foreign trade (1953): exports, £109,535; re-exports, £2,221,405; imports, £11,871,428. Chief exports: concentrated essences, cut flowers.



**Agricultural products:** lily bulbs, potatoes, vegetables, arrowroot.

The Bermudas comprise an archipelago of about 360 small islands, 580 miles east of North Carolina. The largest is (Great) Bermuda or Main Island. Discovered by Juan Bermudez, a shipwrecked Spaniard, early in the 16th century, the islands were settled in 1612 by an offshoot of the Virginia Company and became a Crown colony in 1684. The governor is assisted by nominated Executive and Legislative Councils and a popularly elected Assembly of 36 members. In 1940, sites on the islands were leased for 99 years to the U. S. for air and navy bases. Bermuda is also the headquarters of the West Indies and Atlantic squadron of the Royal Navy. The most important factor in the colony's economy is the tourist trade; in 1952, 93,066 persons visited Bermuda. The mean annual temperature is 71°, with extremes of 49° and 94°. Rainfall averages 58 inches annually.

**BRITISH GUIANA—Status:** Colony.

**Capital:** Georgetown (population 97,821).

**Governor:** Sir Alfred Savage.

**Foreign trade (1953):** exports (including re-exports), BG\$81,681,472; imports, BG\$71,987,349. Chief exports: sugar (47%), bauxite (29%), rice, rum.

**Agricultural products:** sugar (1953: 238,539 long tons), rice (67,633 tons), copra, coffee.

**Minerals (1953):** bauxite (2,060,793 long tons), gold (20,965 bullion oz.), diamonds (301,744 stones).

**Forest products:** balata, timber.

The only British possession in South America proper, British Guiana is on the northeastern coast between Venezuela and Surinam (Dutch Guiana). Settled by the Dutch in the 17th century, it was occupied by the British in 1796 and ceded to them at the end of the Napoleonic wars. Behind the low plain which contains the farm area is a higher area containing forest and mineral resources. A new constitution inaugurated Apr. 1, 1953, provided for a bicameral legislature, with a lower house largely elected under universal adult suffrage, and an executive council with a majority of ministers drawn from the lower house on whose advice the crown-appointed governor was bound to act. Following charges of Communist infiltration into the government, British military and naval reinforcements were dispatched to the colony; and on Oct. 9, 1953, the constitution was suspended.

The heterogeneous population includes Africans and mixed races, 49.5 per cent; East Indians, 44 per cent; aborigines, 2.5 per cent; Portuguese, 2.2 per cent; Chinese, 1 per cent; and others, .8 per cent.

Cultivated areas cover only 155,000 acres, mostly devoted to rice and sugar cane. About 86 per cent of the colony is forested,

but the vast forest resources are relatively unexploited. Timber resources have been estimated at 41,000,000,000 cu. ft. of merchantable timber. Railway mileage is 110, and highway mileage about 700.

The coastland climate is relatively hot and humid, with average temperatures of 78° in January and 81° in October, and only a slight variation between day and night. Inland temperatures are roughly 3° higher. Rainfall is heavy along the coast—about 88 in. annually at Georgetown.

**BRITISH HONDURAS—Status:** Colony.

**Capital:** Belize (population 31,221).

**Governor:** Patrick M. Renison.

**Foreign trade (1953):** exports (including re-exports), BH\$7,500,382; imports, BH\$11,767,314. Chief exports: mahogany, pine.

**Agricultural products:** bananas, sugar cane, citrus fruits.

**Forest products (1953):** cedar lumber and logs (111,029 cu. ft.), mahogany logs and lumber (700,911 cu. ft.), pine lumber (2,477,491 cu. ft.), chicle (610 long tons).

British Honduras is bounded on the north by Mexico and on the west and south by Guatemala. It was settled in 1662 by woodcutters from Jamaica. An irregular form of local government continued until 1871, when it became a Crown colony; it was separated from Jamaica in 1884. The governor is assisted by an Executive Council and by a Legislative Council.

The colony's economy is dependent upon timber and other forest exports. Agriculture has never been adequately developed. There are no railways, and road development is backward (about 135 mi. surfaced). Most of the population are mestizos of Negro, native Indian and white descent.

The climate is subtropical, with maximum recorded temperature of 98°, and minimum of 50°. Rain falls mostly from May to February, and almost continuously from October through December; at Belize the yearly average is 80–85 inches.

## Canada

(Member of Commonwealth of Nations)

**Area (land only):** 3,619,616 square miles.

**Population (est. June 1, 1953):** 14,780,000 (1951: British 48%; French 31%; German 4%; Ukrainian 3%; others 14%).

**Density per square mile:** 4.1.

**Ruler:** Queen Elizabeth II.

**Governor General:** Vincent Massey.

**Prime Minister:** Louis Stephen St. Laurent.

**Principal cities (census 1951):** Montreal, 1,021,520 (seaport); Toronto, 675,754 (manufacturing center); Vancouver, 344,833 (Pacific seaport); Winnipeg, 235,710 (grain); Hamilton, 208,321 (iron and steel); Ottawa, 202,045 (capital); Quebec, 164,016 (seaport); Edmonton, 159,631 (petroleum); Calgary, 129,060 (farming).



**Monetary unit: Canadian dollar.**

Religions (census 1951): Roman Catholic 43%; United Church 20%; Anglican 15%; Presbyterian 6%; Baptist 4%; others 12%.

**HISTORY.** The Norse explorer Leif Ericsson probably reached the shores of Canada (Labrador or Nova Scotia) in A.D. 1000, but the history of the white man in the country actually began in 1497, when John Cabot, an Italian in the service of Henry VII of England, reached the shore of Newfoundland or Nova Scotia. Canada was taken for France in 1534 by Jacques Cartier. The actual settlement of New France, as it was then called, began in 1604 at Port Royal in what is now Nova Scotia; in 1608 Quebec was founded. France's colonization efforts were not very successful, but French explorers by the end of the 17th century had penetrated beyond the Great Lakes to the western prairies and south along the Mississippi to the Gulf of Mexico. Meanwhile, the English Hudson's Bay Company had been established in 1670. Because of the valuable fisheries and fur trade, a conflict developed between the French and English; in 1713, Newfoundland, Hudson Bay and Nova Scotia (Acadia) were lost to England.

During the Seven Years' War (1756-63), England extended its conquest, and the British general, Wolfe, won his famous victory over Montcalm outside Quebec (Sept. 13, 1759). The Treaty of Paris (1763) put Canada under English control.

At this time the population of Canada was almost entirely French, but in the next few decades thousands of British colonists emigrated to Canada from the British Isles and from the American colonies. Partly to placate the French who were concentrated in Quebec, Canada was divided into Upper (British) and Lower (French) Canada in 1791. In 1840 the two provinces again were joined under one government, and in 1849 the right of Canada to self-government was recognized. By the British North America Act of 1867, the Dominion of Canada was created through the confederation of Upper and Lower Canada, Nova Scotia and New Brunswick. Prince Edward Island joined the Dominion in 1873. In 1869 Canada had purchased from the Hudson's Bay Company the vast middle west (Rupert's Land) from which the provinces of Manitoba (1870), Alberta and Saskatchewan (1905) were later formed. In 1871 British Columbia joined the Dominion. The country was linked from coast to coast in 1885 by completion of the Canadian Pacific Railway.

During the formative years between 1867 and 1896, the Conservative Party led by Sir John A. Macdonald governed the country, except during the years 1873-78. In 1896 the Liberal Party took over and under Sir Wilfrid Laurier, an eminent French Ca-

nadian, ruled until 1911. In World War I, more than 500,000 Canadian soldiers fought for the Allied cause. After the Treaty of Versailles, Canada, a full-fledged nation, was admitted to the League of Nations and appointed its own representatives in foreign countries. By the Statute of Westminster (1931) the British Dominions, including Canada, were formally declared to be partner nations with Britain, "equal in status, in no way subordinate to each other," and bound together only by allegiance to a common Crown. The Liberal Party under W. L. Mackenzie King won the elections in 1935 and was returned to power in 1940 and 1945 (he had previously served as prime minister from 1921 to 1930, except for three months in 1926). On Nov. 15, 1948, King resigned and was succeeded by Louis Stephen St. Laurent, who was returned as prime minister in the national elections of June 27, 1949, and continued in office by elections held Aug. 10, 1953.

Newfoundland became Canada's tenth province on March 31, 1949, following a plebiscite held July 22, 1948, in which the people voted by a narrow margin to unite with Canada.

**GOVERNMENT AND DEFENSE.** Canada, a self-governing member of the Commonwealth of Nations, is a federal union of 10 provinces whose powers are laid down in the British North America Act of 1867. The executive powers nominally rest in the hands of the Governor General, who represents the Queen and is appointed by her upon the recommendation of the Canadian Government.

Actually, the Governor General acts only with the advice of the Canadian Prime Minister and the members of the Cabinet, who at the same time sit in the federal Parliament. The Parliament has two houses: a Senate numbering 102 members appointed for life, and a House of Commons numbering 265 members apportioned according to provincial population. Elections are held at least every five years or whenever the party in power is voted down in the House of Commons or considers it expedient to appeal to the people. The Prime Minister is the leader of the majority party in the House of Commons. Laws must be passed by both houses of Parliament and signed by the Governor General in the Queen's name. Results of Parliamentary elections on Aug. 10, 1953, were as follows: Liberals, 170; Progressive Conservatives, 51; Co-operative Commonwealth Federation, 23; Social Credit, 15; Independents, 6.

The members of the Cabinet (July 1954) include Louis S. St. Laurent (Prime Minister), L. B. Pearson (External Affairs), George Marler (Transport), Milton Gregg (Labor), Stuart Garson (Justice, Attorney General), James Sinclair (Fisheries), C. D. Howe (Trade and Commerce, Defense Pro-

## Canadian Governors General and Prime Ministers Since 1867

Term of office	Governor General	Term	Prime Minister	Party
1867-1869	Viscount Monck	1867-1873	Sir John A. Macdonald	Conservative
1869-1872	Baron Lisgar	1873-1878	Alexander Mackenzie	Liberal
1872-1878	Earl of Dufferin	1878-1891	Sir John A. Macdonald	Conservative
1878-1883	Marquess of Lorne	1891-1892	Sir John J. Abbott	Conservative
1883-1888	Marquess of Lansdowne	1892-1894	Sir John S. D. Thompson	Conservative
1888-1893	Baron Stanley	1894-1896	Sir Mackenzie Bowell	Conservative
1893-1898	Earl of Aberdeen	1896(2 mos)	Sir Charles Tupper	Conservative
1898-1904	Earl of Minto	1896-1911	Sir Wilfrid Laurier	Liberal
1904-1911	Earl Grey	1911-1917	Sir Robert L. Borden	Conservative
1911-1916	Duke of Connaught	1917-1920	Sir Robert L. Borden	Unionist
1916-1921	Duke of Devonshire	1920-1921	Arthur Meighen	Unionist-National
1921-1926	Viscount Byng			Conservative
1926-1931	Viscount Willingdon	1921-1926	W. L. Mackenzie King	Liberal
1931-1935	Earl of Bessborough	1926(3 mos)	Arthur Meighen	Conservative
1935-1940	Baron Tweedsmuir	1926-1930	W. L. Mackenzie King	Liberal
1940-1946	Earl of Athlone	1930-1935	Richard B. Bennett	Conservative
1946-1952	Viscount Alexander	1935-1948	W. L. Mackenzie King	Liberal
1952-	Vincent Massey	1948-	Louis Stephen St. Laurent	Liberal

duction), J. G. Gardiner (Agriculture), J. J. McCann (National Revenue), George Prudham (Mines and Technical Surveys), P. J. Martin (Health and Welfare), Alcide Côté (Postmaster General), W. E. Harris (Finance), Ralph Campney (Defense), Hugues Lapointe (Veterans Affairs), R. H. Winters (Public Works), W. Ross Macdonald (Solicitor General), Jean Lesage (Resources and Development), J. W. Pickersgill (Citizenship and Immigration), and Roch Pinard (Secretary of State).

The ten provincial governments are nominally headed by Lieutenant Governors appointed by the federal Government, but the executive power in each actually is vested in a cabinet headed by a prime minister, who is leader of the majority party. In nine of the ten provinces the legislature is composed of a one-house assembly elected by the people for 4 years.

In Quebec there is a second chamber, the Legislative Council, composed of nominees of the Provincial Government.

**Judicial System.** The judicial system consists of a supreme court in Ottawa (established in 1875), with appellate jurisdiction, and a supreme court in each province as well as county courts with limited jurisdiction in most of the provinces. The Governor General in Council appoints the judges of these courts.

**Defense.** Canadian armed forces, consisting of the Army, Royal Canadian Air Force and the Royal Canadian Navy, are under the Ministry of National Defense. Conscription was in effect during World War II. Canadian casualties were 104,125, including 41,371 dead.

On Apr. 1, 1953, the strength of the

army was 48,458; air force, 40,482; navy, 15,546. Increases were projected under a defense expansion program. Canadian troops and ships served in Korea. On Jan. 1, 1954, the navy had in active service and reserve one light aircraft carrier, 2 cruisers, 7 destroyers, 28 frigates and numerous ancillary craft.

The Royal Canadian Mounted Police is the constabulary maintained by the federal government. Among its duties are the enforcement of smuggling laws, suppression of traffic in drugs, protection of government buildings and dockyards, and counter-subversive work.

**SOCIAL AND ECONOMIC CONDITIONS.** **Education.** Elementary schools in all provinces except Quebec are free, as is secondary education in most provinces. The supreme education authority in Quebec is a council of public instruction with two aides supervising the Roman Catholic and Protestant schools respectively. In the rest of the provinces the system is non-denominational, and education for the most part is compulsory for all children between the ages of 8 and 14. Of Canada's 24 universities, 7 are state-controlled and 17 are independent of provincial control. Leading universities are Toronto, which belongs to the first group, and McGill (Montreal), which belongs to the second group.

**Agriculture.** Agriculture, including horticulture, fruit-growing and the raising of stock and poultry, is the largest single industry. Canada is one of the world's greatest wheat-exporting countries; production is concentrated in Manitoba, Saskatchewan and Alberta. The estimated



## CROP ACREAGE AND PRODUCTION

(in thousands, provisional figures)

	Acres		Bushels	
	1952	1953	1952	1953
Wheat	25,995	25,513	687,922	613,962
Oats	11,062	9,830	466,805	406,960
Barley	8,477	8,911	291,379	262,065
Rye	1,274	1,494	24,833	28,775
Corn	339	362	19,722	20,854

value of field crops in 1953 was \$1,664,512,-000 (preliminary).

Stock raising and dairy farming have grown greatly since 1920. Ontario and Quebec are the most important dairying provinces. On June 1, 1953, Canada had 9,762,200 cattle, 4,447,000 hogs, 1,721,300 sheep and 1,096,200 horses. Dairy production in 1953 included butter, 151,303 short tons; milk, 8,112,400 tons; cheese (cheddar), 37,593 tons. Wool production was 8,621,000 pounds, greasy basis.

**Industry.** Canadian manufactures rely mainly on domestic raw materials; growing industries which depend largely on materials imported in a raw or semi-finished state include the manufacture of automobiles, sugar and rubber goods as well as the iron and steel industry in Nova Scotia, Quebec and Ontario. The latter two provinces account for more than 80 per cent of all manufactures. The abundance of cheap water power is one of the chief factors in the growth of Canadian industry. Production of steel ingots and castings in 1953 was 4,115,469 short tons; pig iron, 3,012,269 tons; ferroalloys, 150,595 tons. In 1952 the gross value of manufactured products was \$16,915,215,000 (preliminary); in 1951 there were 37,021 plants which employed 1,273,187 persons. The most important industries by value of output were pulp and paper, meatpacking, non-ferrous-metals smelting and refining, saw-mills and electrical apparatus.

**Trade.** Canada is one of the great trading nations of the world. The bulk of its foreign commerce is in raw or semi-finished products.

Trade statistics (in millions of Canadian dollars):

Year	Imports	Exports	Re-exports
1950	3,174.3	3,118.4	38.7
1951	4,084.9	3,914.5	48.9
1952	4,030.5	4,301.1	54.9
1953	4,382.8	4,117.4	55.2

In 1953, Canada's principal customers were the U. S. (59%), Britain (16%), Japan (2.9%), western Germany (2.0%) and Belgium (1.7%). Leading suppliers were the U. S. (74%), Britain (10%), Venezuela (3.5%), western Germany (0.8%) and Brazil (0.8%). The leading exports were wheat (16%), newsprint (14%), wood and lumber (9%), wood pulp (6%) and other

grains (5%). Leading imports were iron and steel and manufactures (35%), fibres, textiles and products (9%), petroleum and products (7%) and nonferrous metals and products (8%).

**Communications.** Because Canada's exports are to a large extent bulky raw materials, cheap water transportation is essential. The country's system of canals, especially those connecting the Great Lakes, forms an integral part of the inland communications system. Canal traffic amounted to 33,402,789 short tons in 1953; 19,571,875 tons of freight were carried on the Welland Canal alone.

Railway facilities have been improved in relation to the export of wheat from the prairie provinces and to the development of the mineral and wood pulp industries in northern Quebec and northern Ontario. About 90 per cent of the railway mileage

## PROVINCES AND TERRITORIES

Province	Land area, sq. mi.	Population June 1953 Est.
Alberta	248,800	1,002,000
British Columbia	359,279	1,230,000
Manitoba	219,723	802,000
New Brunswick	27,473	536,000
Newfoundland	152,734	383,000
Nova Scotia	20,743	663,000
Ontario	363,282	4,897,000
Prince Edward Island	2,184	106,000
Quebec	523,860	4,269,000
Saskatchewan	237,975	861,000

Territories		
Northwest Territories	1,258,217	16,000
Yukon	205,346	9,000

Provinces	Capital	Prime Minister 1954
Alberta	Edmonton	Ernest C. Manning <sup>1</sup>
British Columbia	Victoria	William Bennett <sup>1</sup>
Manitoba	Winnipeg	D. L. Campbell <sup>2</sup>
New Brunswick	Fredericton	Hugh J. Flemming <sup>3</sup>
Newfoundland	St. John's	Joseph Smallwood <sup>4</sup>
Nova Scotia	Halifax	Angus L. Macdonald <sup>4</sup>
Ontario	Toronto	Leslie Frost <sup>5</sup>
Prince Edward Island	Charlotte-town	Walter Jones <sup>4</sup>
Quebec	Quebec	Maurice Duplessis <sup>5</sup>
Saskatchewan	Regina	T. C. Douglas <sup>6</sup>
Territories		
Northwest Territories	Ottawa	H. A. Young*
Yukon	Dawson	Fred Fraser*

<sup>1</sup> Social Credit; <sup>2</sup> Liberal-Progressive; <sup>3</sup> Progressive Conservative; <sup>4</sup> Liberal; <sup>5</sup> Union Nationale; <sup>6</sup> Co-operative Commonwealth Federation.  
\* Commissioner.



of 43,000 (main-line track) is under the control of two systems, the government-owned Canadian National and the privately-owned Canadian Pacific. Canada's principal merchant marine lines are the Canadian Pacific, which operates a subsidiary ocean steamship company, and the Canadian National, which has minor steamship lines under its control. The merchant marine on Dec. 31, 1953, numbered 1,860 steamers and motorships (of over 100 tons) with tonnage of 1,862,199.

On Dec. 31, 1951, Canada had 173,232 miles of surfaced highways and 395,542 miles of nonsurfaced roads.

The Trans-Canada Air Lines, established in 1937, is controlled by the federal government. In 1953, Canadian airlines carried 2,721,029 revenue passengers and flew 942,433,397 passenger-miles. In 1952, Canada had 3,140,000 telephones and 2,313,944 licensed private radio sets.

**Finance.** Recent data are as follows (in millions of Canadian dollars):

	1952-53	1953-54*	1954-55†
Revenue	4,360.8	4,400.1	4,464.0
Expenditure	4,337.3	4,390.0	4,460.0

\* Provisional. † Budget estimate.

The net public debt (gross debt less active assets) on Mar. 31, 1954, was reported at \$11,151,600,000, compared to \$11,161,700,000 on Mar. 31, 1953, \$11,185,281,546 on Mar. 31, 1952, and \$3,648,691,449 on Mar. 31, 1941.

**NATURAL FEATURES AND RESOURCES; CLIMATE.** Covering most of the northern part of the North American continent and with an area larger than that of the United States, Canada's topography is extremely diversified. The northeastern region, including most of Quebec, northern Ontario and Manitoba, and the Northwest Territories, with Hudson Bay in the center, is an important source of minerals, wood pulp and water power. In the east the mountainous maritime provinces have an irregular coast line on the Gulf of St. Lawrence and the Atlantic. The St. Lawrence plain, covering most of southern Quebec and Ontario, and the interior continental plain, covering southern Manitoba and Saskatchewan and most of Alberta, are the principal cultivable areas. They are separated by a forested plateau rising from Lakes Superior and Huron. Westward toward the Pacific, most of British Columbia, Yukon, and part of western Alberta are covered by parallel mountain ranges including the Rockies. The Pacific border of the coast range is ragged with fiords and channels. The highest point in Canada is Mt. Logan, 19,850 ft., located in the Yukon.

Average annual rainfalls at various cities are as follows, in inches: Calgary, 15.8; Winnipeg, 20.2; Victoria (B.C.), 30.9; Toronto, 31.3; Ottawa, 32.5; Quebec, 42.1; Halifax, 55.5.

Canada has an abundance of large and small lakes. In addition to the Great Lakes on the United States border, there are nine others which are more than 100 miles long and 35 which are more than 50 miles long.

The two principal river systems are the Mackenzie and the St. Lawrence. The St. Lawrence with its tributaries is navigable for over 1,900 miles and is the commercial artery of eastern Canada.

As most of the Canadian rivers have waterfalls on their courses they are of considerable importance as sources of power. Average monthly production of electricity in 1953 was 5,457,000,000 kwh.

**Minerals.** Canada's mineral resources are both rich and varied. Mining production in 1953 was valued at \$1,331,211,503. Metals come mainly from two widely separated regions, the mountain ranges of the Pacific coast and the province of Ontario. Copper ore also exists in Quebec, Manitoba and Newfoundland. Production of petroleum centers in Alberta. There are important deposits of uranium in the Northwest Territories.

#### MAJOR MINERALS

Mineral	1952	1953*
Asbestos (tons)	929,332	911,713
Coal (tons)	17,579,002	15,760,000
Copper (lb.)	516,075,097	503,224,887
Gold (oz.)	4,471,725	4,061,205
Iron ore (tons)	5,271,849	6,501,060
Lead (lb.)	337,683,891	394,458,042
Nickel (lb.)	281,117,072	287,931,430
Petroleum (bbl.)	61,237,322	81,311,531
Silver (oz.)	25,222,227	30,145,259
Zinc (lb.)	743,604,155	797,647,860

\* Provisional.

**Forests and Fisheries.** The total area of land covered by forests is estimated at 1,290,960 square miles, of which 435,000 are productive and accessible. Production of sawn lumber was estimated at 7,084,000,000 bd. ft. in 1953. The manufacture of pulp and paper is one of the leading industries. Newsprint production in 1953 was estimated at 5,721,296 short tons; exports were 5,375,250 tons, of which 4,917,216 tons went to the U. S.

Fishing, Canada's oldest industry, is carried on along the Atlantic and Pacific coasts and on the inland lakes. The most important fish are salmon, cod, herring, mackerel, lobsters, sardines, halibut, haddock, whitefish and trout. The total value of fishery production in 1952 (excluding Newfoundland) was \$149,737,361; the catch totaled 13,120,213 cwt.

**Climate.** Canada has great variations of climate. South of the Gulf of St. Lawrence, the maritime provinces have an average temperature of 40° for the year and over 60° for the summer months. In Quebec and northern Ontario the winters are cold

and the summers average from 60° to 65°. In southern Ontario the average summer temperature is 65°, with an occasional rise to 90°. The prairie provinces have a distinctly continental climate with comparatively short warm summers and long cold winters. The west coast has a climate similar to that of the southern coast of England. Northwest and northeast of Hudson Bay the climate is too severe for trees.

#### **FALKLAND ISLANDS AND DEPENDENCIES—Status: Crown Colony.**

Governor: Sir Miles Clifford.

Capital: Stanley (population 1,246).

Foreign trade (1953): exports, £3,195,959; imports, £2,825,348. Chief export: whale oil.

This sparsely inhabited Crown colony consists of a group of islands in the south Atlantic about 250 miles east of the South American mainland. Dependencies include all islands and Antarctic territory between 20° and 50° w. long., south of 50° s. lat., and between 50° and 80° w. long., south of 58° s. lat. The chief industry is sheep raising, and apart from the production of wool, hides and skins and tallow, there are no known resources. The whaling industry is carried on successfully from South Georgia Island; 132,341 barrels of whale oil were produced in 1953.

The islands were discovered by John Davis in 1592. East Falkland Island was claimed for France in 1764, and West Falkland Island for Britain the following year. The French settlement later passed to Spain, and in 1829 was colonized by Argentina. The Argentines were ejected by the British in 1833 and have since reasserted their claim to the islands many times. In 1914 the Battle of Falkland Islands was fought nearby, resulting in a British victory. During World War II, Stanley, the only town, was an important naval base.

The climate is equable though relatively cold, with temperatures averaging about 47° in midsummer and 37° in midwinter. Annual rainfall is about 25 inches.

#### **JAMAICA AND DEPENDENCIES—Status: Colony.**

Capital: Kingston (population 201,911).

Governor: Sir Hugh Foot.

Chief Minister: W. A. Bustamante.

Foreign trade (1953)\*: Exports, £25,735,607 (58% to Britain); imports, £35,268,324 (43% from Britain). Chief exports: sugar (41%), bananas, bauxite, rum.

Agricultural products (1953): sugar (330,237 long tons), bananas (10,216,000 stems), rum, citrus fruits, ginger, coffee, pimento.

Mineral: bauxite.

\* Excluding dependencies.

Jamaica, the largest island in the British West Indies (4,470 sq. mi.), is eighty miles south of the eastern end of Cuba. Its is-

land dependencies include the Turks and Caicos Islands (about 600 mi. N.E.), Cayman Islands (about 300 mi. N.W.) and two uninhabited cays. It was discovered by Columbus in 1494 and remained in Spanish possession until 1655, when it was taken by the British. According to the constitution of Nov. 20, 1944, as amended in 1953, the Governor is assisted by a House of Representatives of 32 popularly elected members; a Legislative Council (upper house) of 15 members and an Executive Council of 10 members, of whom the chief minister is appointed by the governor subject to the approval of the House.

Sites were leased for 99 years to the U. S. in 1940 for naval and air bases.

The colony's economy depends on agriculture, and about 200,000 acres are under cultivation. Sugar took the place of bananas as the chief crop during World War II. Jamaica is virtually the sole source of pimento.

Rail mileage totals 299, and highways 4,594. Jamaica's favorable climate makes it attractive to tourists. Temperatures at Kingston range from about 71° to 88°, but are considerably cooler inland. The rainy seasons are in May and October; total fall is about 65 inches a year (33 at Kingston).

#### **LEEWARD ISLANDS—Status: Colony.**

Capital: St. John's (population 10,000).

Governor: Sir Kenneth Blackburne.

Foreign trade (1952): exports, BWI\$16,703,251; imports, BWI\$15,731,000. Chief export: sugar.

Agricultural products: sugar, cotton, coconuts, citrus fruits, tobacco.

The Leeward Islands constitute a federated group southeast of Puerto Rico; they are divided into four presidencies—Antigua (108 sq. mi.) and dependencies (63 sq. mi.); Virgin Islands (67 sq. mi.); St. Kitts (68 sq. mi.) and Nevis (50 sq. mi.) and dependency (34 sq. mi.); and Montserrat (33 sq. mi.). The whole federation has a nominated Executive Council and a partially elected Legislative Council. Each presidency also has a local administration. In 1940, the U. S. acquired a 99-year lease on sites for a naval and air base on Antigua. The islands are agricultural.

Temperatures average about 76° in January and 81° in August; rainfall is moderate throughout the year.

#### **TRINIDAD AND TOBAGO—Status: Colony.**

Capital: Port of Spain (population 111,350).

Governor: Maj. Gen. Sir Hubert Rance. Foreign trade (1953): exports (including re-exports), BWI\$257,023,984 (42% to Britain); imports, BWI\$236,309,773 (38% from Britain). Chief exports: petroleum (72%), sugar (10%), cacao (4%).

Agricultural products: sugar (1953: 152,700 long tons), cacao, coconuts.



**Minerals:** petroleum (1953: 22,346,000 barrels), asphalt (143,236 long tons).

The islands of Trinidad and Tobago are 16 and 21 miles, respectively, off Venezuela just north of the Orinoco delta. Both were discovered by Columbus in 1498, and remained Spanish possessions until 1797, when the British took them. They are administered by a governor, assisted by an executive council and a legislative council with unofficial elected majorities. In 1941 the United States was granted 99-year leases on the islands for naval and air bases covering a total of 25,000 acres.

The soil is rich for the growing of tropical products; sugar and cacao are the principal crops. Trinidad is one of the leading oil producers of the Commonwealth, and the world's most notable source of asphalt, found in Pitch Lake, thirty-eight miles southeast of Port of Spain. Port of Spain is the chief port, and a transshipment point for Orinoco trade. About a third of the population of the Colony is East Indian. There are several oil refineries.

Trinidad's climate is tropical, with a mean annual temperature of 80°. The rainy season is from May to January (except October). Total annual rainfall is about 65 inches at Port of Spain and varies from 50 to 120 inches elsewhere.

**WINDWARD ISLANDS—Status:** Colony. Capital: St. George's (population 5,755). Governor: Edward Beetham.

Foreign trade (1952): exports, BWI\$18,-306,000; imports, BWI\$24,878,000.

Agricultural products: arrowroot (St. Vincent), nutmeg (Grenada), mace (Grenada), cacao.

These islands, four in number, form the southern portion of the Lesser Antilles in the Caribbean; they extend approximately 250 miles from the French colony of Guadeloupe on the north to the British colony of Trinidad on the south. Their total area of about 820 square miles divides as follows: Dominica, 304; St. Lucia, 233; St. Vincent, 150; Grenada, 133. The four units are not federated and have no common legislature or laws, although they do have a common governor.

More than two-thirds of the inhabitants are Negroes, nearly one-third mulatto, and about 2 per cent white. Agriculture is the only industry. St. Vincent has a virtual monopoly on the world supply of arrowroot, and Grenada furnishes about 40 per cent of the world's nutmeg.

Climate is pleasant, although rainfall is heavy, particularly in summer, amounting in places to as much as 200 inches a year (80 at St. George's). The temperature in January averages 77°, in September, 80°.

## ASIA

**ADEN—Status:** Colony and Protectorate. Governor: Sir Tom Hickinbotham.

Foreign trade (1953): exports, 339,400,-

651 East African shillings; imports, 1,223,-306,584 shillings.

The British colony and protectorate of Aden is situated on the volcanic southern tip of the Arabian peninsula, along the Gulf of Aden. The colony (port) of Aden was annexed to Britain in 1839 and was part of the Bombay Presidency until 1932, when it became a separate province with the chief commissioner responsible to the Indian government. In 1937 it was transferred from Indian to Imperial control as a Crown colony. It is administered by a governor and commander in chief aided by an Executive Council. The 20-odd sultans who rule their respective territories in the protectorate are responsible to him.

The island of Perim (5 sq. mi.), the Kuria Muria Islands, and the island of Kamaran (22 sq. mi.) are attached administratively to Aden.

Aden colony is essentially a transshipment point and bunkering station and is also the commercial center for the Yemen and the African coast opposite. Aden airport is a station on the Khartoum-Karachi air route. Agriculture is unimportant except for some coffee and tobacco, and except for the large petroleum refinery of the Anglo-Iranian Oil Co., which went into operation in 1954, manufacturing activity is limited to salt, cigarettes and dhows.

**BAHREIN ISLANDS—Status:** Protectorate and Sheikdom.

British Political Agent: J. W. Wall.

These islands form an archipelago off Arabia's east coast and are nominally an independent sheikdom, ruled by Sheik Sir Salman bin Hamad al Khalifah, but are actually a protectorate of Great Britain, which is represented by a political agent. They are the center of the Persian Gulf pearl fisheries and the site of an airport on the London-Australia route. The concession for exploitation of petroleum deposits, discovered in 1932, is held by an affiliate of U. S.-owned interests. Output in 1953 was 10,978,351 barrels. Production at the Bahrain refinery in the same year was 72,856,086 barrels. Agriculture is of some importance. Most of the trade of the Saudi Arabian provinces of Nejd and Hasa pass through Bahrain. Chief exports are rice, cotton goods, pearls, coffee and tea. The capital is Manama.

## BORNEO

**COLONY OF NORTH BORNEO—Status:** Colony.

Capital: Jesselton (population 37,511).

Governor: Roland E. Turnbull.

Foreign trade (1953)\*: exports, Str.\$60,-200,000; imports, Str.\$70,000,000. Chief exports: rubber (39%), timber (20%).

Agricultural products: rubber (1953: 16,800 long tons), rice, copra.

Forest products: timber, cutch, rattans.

\* Excluding transit trade.



The Colony of North Borneo, constituting the extreme northern portion of the island of Borneo, consists largely of highlands and occasional open valleys and plateaus. The territory was a British protectorate administered under a royal charter by the British North Borneo Company from 1881 until July 15, 1946, when it assumed the status of a Crown colony. It was occupied by Japanese troops from 1942 until 1945. Labuan (pop. 9,000; area, 30 sq. mi.), a small island off the North Borneo coast, was transferred from the jurisdiction of the Straits Settlements to that of North Borneo in 1946.

The population is comprised largely of aboriginal tribesmen living on a very primitive level of culture and social organization. Mineral resources are believed to be considerable, but the colony's income is based on agricultural and jungle produce.

The climate of North Borneo is tropical, with a mean annual temperature range of only 3°, although extremes of 64° and 91° have been recorded. The total rainfall varies between 60 and 180 inches annually and is heaviest in the last three months.

**BRUNEI—Status: Protectorate.**

Capital: Brunei (population 16,000).

Sultan: Omar Ali Saifuddin.

British Resident: J. C. H. Barcroft.

Foreign trade (1953): exports, Str.\$266,718,072; imports, Str.\$123,322,162. Chief export: petroleum (99%).

Agricultural products: rice, rubber.

Brunei lies on the northwestern coast of Borneo, entirely surrounded by Sarawak. It was placed under British protection in 1888, and in 1906 a treaty was concluded whereby the native sultan yielded administration of the state to a British resident. The governor of Sarawak was appointed high commissioner for Brunei in 1948. Japanese troops occupied Brunei from 1942 until 1945.

Most of the inhabitants are Malays. The bulk of the population lives in and around the capital, situated on the Brunei River 9 miles from its mouth. The interior is largely forested and contains rich timber. All petroleum is exported to Sarawak for refining; exports in 1953 amounted to 4,799,473 long tons.

Brunei's climate is comparable to that of North Borneo, except that the wet season is longer, often lasting until March.

**SARAWAK—Status: Colony.**

Capital: Kuching (population 37,949).

Governor: Sir Anthony F. Abell.

Foreign trade (1952): exports, Str.\$438,563,317; imports, Str.\$382,945,953. Chief exports: petroleum (70%), rubber (15%).

Agricultural products: rubber (1952: 31,471 long tons), pepper, copra, rice.

Minerals: petroleum, gold, silver, coal.

Sarawak extends along the northwestern coast of Borneo for about 500 miles. In

1841 part of the present territory was granted by the sultan of Brunei to Sir James Brooke. The state, enlarged by additional concessions made between 1861 and 1905, continued to be ruled by members of the Brooke family until the Japanese occupation in Dec., 1941. A British protectorate since 1888, Sarawak became a Crown colony July 15, 1946, through agreement between the British government and the then ruling rajah, Sir Charles Vyner Brooke.

The colony is mountainous and very well watered; inland communication is largely by water. Most of the inhabitants are Malays, Dyaks and Chinese. The principal mineral is petroleum, which was discovered at Miri in 1909 and subsequently worked by Sarawak Oilfields, Ltd. A large proportion of the petroleum exports reflects petroleum imported from Brunei and refined in Sarawak. There are also important forest resources. Under the enlightened rule of the Brookes, Sarawak was developed into a highly organized community.

Sarawak's climate, though tropical, is healthful; the temperature seldom rises above 90° and falls to 70° at night. Average annual rainfall at Kuching is 160 inches.

## Ceylon

(Member of Commonwealth of Nations)

Area: 25,332 square miles.

Population (census 1953): 8,103,648 (1946: Sinhalese, 68%; Tamil, 22%; Moors, 6%; Burghers and Eurasians, .5%; Europeans [5,292] and others, 3.5%).

Density per square mile: 319.9.

Ruler: Queen Elizabeth II.

Governor General: Sir Oliver Goonetilleke.

Prime Minister: Sir John Kotalawala.

Principal cities (census 1953): Colombo, 424,816 (capital); Jaffna, 76,664 (fibers, tobacco); Kandy, 57,013 (tea); Galle, 55,825 (seaport).

Monetary unit: Ceylonese rupee.

Languages: English, Sinhalese, Tamil.

Religions (est.): Buddhism, 60%; Hinduism, 20%; Christianity, 10%; Mohammedanism and others, 10%.

**HISTORY.** The island of Ceylon lies in the Indian Ocean 12 miles southeast of the southern tip of India. Known to the Greeks and Romans as Taprobane and to Mohammedan seamen as Serendib, it is reputed to have been invaded from India in 504 B.C. by Vijaya, the first Sinhalese king. Buddhism was introduced in the third century B.C. In subsequent centuries the island was invaded and occupied several times by Indian princes.

Ceylon was visited in 1505 by the Portuguese, who found the island divided into seven native kingdoms. The Portuguese settlers were ousted in the middle of the

17th century by the Dutch, who in turn were defeated by an English force in 1796. Ceylon became a Crown colony in 1796, and was formally ceded to England by the treaty of Amiens in 1802.

The Donoughmore constitution of 1931 vested control over most local affairs in a state council, which had an elected majority. The arrangement proved generally unacceptable, and after World War II a commission headed by Lord Soulbury drafted a new constitution. Elections held in Aug. and Sept., 1947, were won by the United Nationalists, a center group. The Ceylon Independence Act received royal assent on Dec. 10, 1947, and on Feb. 4, 1948, Ceylon became a full-fledged, self-governing dominion, with Stephen Senanayake as prime minister. On his death, Mar. 22, 1952, his son Dudley took office. The latter resigned on account of ill health on Oct. 12, 1953, and was succeeded by Sir John Kotalawala.

**GOVERNMENT.** Under the new constitution, Ceylon's government is headed by the Crown-appointed governor general, who is advised by a council of ministers headed by the prime minister. The bicameral parliament consists of a House of Representatives of 101 members (95 elected by full adult suffrage), and a Senate composed of 15 elected and 15 appointed members.

Elections of May 1952 returned to the House of Representatives 54 United Nationalists, 11 Independents, 3 Communists, 4 Tamil Congress, 2 Federalists, 1 Republican, 1 Labour and 19 others.

Close relations in defense matters are maintained with the United Kingdom under terms of the 1947 defense agreement, which permits the stationing of British troops on the island. The Royal Navy has an extensive base at Trincomalee.

**SOCIAL AND ECONOMIC CONDITIONS.** Free education is available in public schools from kindergarten to university. The illiteracy rate in 1946 (5 years and over) was 42.2%. In May 1952, there were 4,843 Sinhalese and Tamil schools with 1,126,110 pupils, and 657 English and bilingual schools with 287,646 pupils. The University of Ceylon (founded in 1942) had 2,232 pupils in 1952-53.

Ceylon is heavily dependent on food imports, particularly rice, the staple food. A large part of the cultivated land (25% of the total area) is devoted to the chief export crops—tea (1953: 155,600 metric tons), rubber (1953: 100,100 tons) and coconut products, all of which are grown for the most part on plantations. Other crops include rice (1953: 445,000 tons paddy), fruits, cinnamon and citronella. In 1953, there were 1,220,528 cattle, 657,936 buffalo and 497,775 goats.

Recent foreign-trade data are as follows (in millions of Ceylonese rupees):

	1951	1952	1953
Exports	1,904	1,502	1,568
Imports	1,559	1,705	1,610

Chief exports by value in 1953 were tea (52%), rubber (21%) and coconut products (17%). Leading customers were Britain (25%), China (16%) and Australia (9%); leading suppliers, Britain (22%), China (13%) and India (12%).

Ceylon is well served by highways and the government railway, which total 18,560 and 894 miles respectively. A fast ferry connects railheads in India and Ceylon.

**NATURAL FEATURES AND RESOURCES; CLIMATE.** Most of the island is flat, but mountains in the south rise to 8,000 feet. The island extends to a maximum of 270 miles north and south, and 140 miles east and west. There are numerous rivers, the longest of which is the Mahaweli-Ganga (206 miles).

Mineral resources include graphite (plumbago) (1953 exports: 7,218 metric tons), gem stones, mica, magnesite and vanadium; uranium deposits have been reported.

A distinctive feature of Ceylon's climate is the monsoon, which appears in May and in October-November. Annual rainfall varies from 40 inches in the northeast to more than 200 in the southwest. The mean annual temperature at Colombo is 80.5°.

#### CYPRUS—Status: Colony.

Capital: Nicosia (pop. 1953: 41,000).

Governor: Robert P. Armitage.

Foreign trade (1953): exports (including re-exports), £14,462,527; imports, £21,219,228. Chief export: pyrites (27%).

Agricultural products: barley, wheat, potatoes, wine, fruit.

Minerals: copper ore (concentrates), pyrite ore.

Cyprus, third largest island in the Mediterranean, is roughly equidistant from Asia Minor to the north and Syria to the east. The site of early Phoenician and Greek colonies, it passed in 1571 from the rule of Venice to that of the Ottoman Empire, under which it remained until 1878, when it was ceded to Great Britain for administrative purposes. On the outbreak of hostilities with Turkey in World War I (Nov. 5, 1914), the island was formally annexed to Great Britain.

The governor is advised by a nominated Executive Council, but he alone possesses the lawmaking power.

The people are mainly Greeks and Turks, although there is an Armenian colony and a distinct, though small, Latin colony. More than 80 per cent of the population is Christian. Agriculture is the principal industry. Sponge fishing is also important, as well as copper mining.



The mean annual temperature is about 69°; annual rainfall averages about 19 inches. A cool, wet season lasts from October to March.

#### **HONG KONG—Status: Colony.**

Capital: Victoria (population 767,000).

Governor: Sir Alexander Grantham.

Foreign trade (1952): exports (in Hong Kong dollars), \$2,899,010,000; imports, \$3,779,487,000. Chief export: textiles.

Agricultural products: rice, sugar cane. Major industries: shipbuilding, rope making, cement, sugar refining, textiles.

The colony of Hong Kong comprises the island of Hong Kong (32 sq. mi.), Stonecutters' Island, and the Kowloon peninsula and the New Territories on the adjoining mainland. The island of Hong Kong, located at the mouth of the Canton River about 90 miles southeast of Canton, was ceded to Britain in 1841.

Stonecutters' Island and Kowloon were annexed in 1860, and the New Territories, which are mainly agricultural lands, were leased from China in 1898 for 99 years. Hong Kong was attacked by Japanese troops Dec. 7, 1941, and surrendered the following Christmas Day. It remained under the occupation of the Japanese until Sept., 1945.

Possessing an excellent natural harbor 17 miles in extent, the only safe deep-sea anchorage between Shanghai and Indo-China, Hong Kong is the entrepôt for trade throughout southern China and the western Pacific. It is an important British military and naval base.

The cities of Victoria and Kowloon contain the greater part of the population, which is overwhelmingly Chinese. Besides those Chinese engaged in agriculture or industry, a large population lives in sampans or junks either in Victoria Harbour or neighboring bays, supporting itself by fishing or by laboring on the wharves.

Hong Kong has an agreeable climate, although violent typhoons sometimes descend upon the Colony. The average annual temperature is 72°, ranging from 59° in February to 82° in July. Rainfall, most of which occurs during the summer, is about 85 inches a year.

#### **MALAYAN FEDERATION and SINGAPORE—Status: Protectorates and Crown Colony.**

Capital: Singapore (population 1947: 441,885).

Federation Capital: Kuala Lumpur (population 1947: 176,195).

Commissioner General in Southeast Asia: Malcolm Macdonald.

High Commissioner of Malayan Federation: Sir Donald MacGillivray.

Governor of Singapore: John F. Nicoll. Foreign trade (1953): exports, Str.\$2,911,314,750 (16% to Britain); imports, Str.\$3,227,399,872 (25% from Indonesia). Chief exports: rubber (43%), tin (13%).

Agricultural products: rubber (1953: 574,389 long tons), rice (clean), 441,300 tons, coconuts.

Minerals: tin (1953: 62,411 long tons), iron ore (1,062,678 tons), coal (286,364 tons), tungsten, bauxite, manganese ore.

Forest products: timber, damar, jelutong.

The Federation consists of semi-independent states occupying most of the Malay peninsula and the island of Singapore off the peninsula's southern tip, together with several smaller islands. The native states were brought under British administration by a process of commercial and political exploitation in the late 19th and early 20th centuries. Singapore, founded in 1819 by Sir Stamford Raffles, had been developed into the principal British naval base in the Far East prior to World War II. Japanese troops invaded the Malayan States in Dec. 1941, and captured Singapore Feb. 15, 1942.

The Malayan Federation was established in 1948 to replace the Malayan Union, which was created in 1946. It comprises the British settlements of Malacca and Penang and the protected states of Johore, Kedah, Kelantan, Negri Sembilan, Pahang, Perak, Perlis, Selangor and Trengganu. Under the high commissioner, to whom power is delegated jointly by the Queen and the Malay rulers, there is a federal executive council and a federal legislative council.

British influence in the affairs of the nine native states is limited to defense and foreign affairs. The sultan of each state has undertaken to promulgate a written constitution for his state.

Singapore, comprising the island of Singapore and Christmas Island, a dependency, became a separate crown colony on Apr. 1, 1946, when the former colony of the Straits Settlements was dissolved. Penang and Malacca were transferred to the Malayan Union, and the small island of Labuan to North Borneo. The Cocos or Keeling Islands were transferred to Australian control in 1951.

The Commissioner General in Southeast Asia is charged with the coordination of administration in the Malayan Federation, Singapore, Sarawak, North Borneo and Brunel.

Since June, 1948, a considerable number of British and other troops have had to be stationed in the area to cope with Communist-led guerrillas. About 50 per cent of the population of the Federation is Malayan and 38 per cent Chinese; about 70 per cent of the population of the colony of Singapore is Chinese.

Rubber and tin form the basis of the area's prosperity, and the Federation is the world's leading producer of tin ore. Over 60 per cent of the cultivable area is devoted to the growing of rubber.



The climate of Singapore, principal city of the area, is hot and humid, with practically no seasonal change; mean average temperature is 80°. The total yearly rainfall is about 95 inches.

## India (Republic)

Area: 1,174,116 square miles (excluding Kashmir, 82,258 square miles).

Population (census 1951): 356,691,760\* (Hindu [predominant], Moslem, Sikh, Christian, Buddhist).

Density per square mile: 303.8†

President: Rajendra Prasad.

Prime Minister: Pandit Jawaharlal Nehru.

Principal cities (census 1951): Bombay, 2,839,270 (seaport; cotton and textiles); Calcutta, 2,548,677 (chief port); Madras, 1,416,056 (seaport); Hyderabad, 1,085,722 (trade center); Delhi, 914,973 (manufacturing); Ahmedabad, 788,333 (manufacturing); Bangalore, 778,977 (manufacturing); Kanpur (Cawnpore), 705,383 (textiles); New Delhi, 276,314 (capital).

Monetary unit: Rupee.

Principal languages: English (official), Hindi, Marathi, Gujarati, Punjabi, Telugu, Bengali, Tamil, Kanarese.

\* Excluding Kashmir (est. 1951: 4,400,000) and tribal areas of Assam (est. 1954: 560,000). † Excluding Kashmir.

**HISTORY.** The Republic of India is one of the largest, richest and most populous nations in the world. A sovereign republic within the Commonwealth of Nations, it contains most of pre-1947 India's industrial wealth and natural resources.

The Aryans or Hindus who invaded India between 2400 and 1500 B.C. from the northwest found a land already well civilized. Buddhism was founded in the 6th century B.C. and spread through northern India. The first exact date in Indian history is 327 B.C., when Alexander the Great invaded India. Meanwhile India continued to be divided into rival states.

In 1526, Mohammedan invaders founded the great Mogul empire, centered on Delhi, which lasted at least in name until 1857. Akbar the Great (1542-1605) strengthened this empire and became the ruler of a greater portion of India than had ever before acknowledged the suzerainty of one man. The long reign of his great-grandson, Aurangzeb (1658-1707) represents both the culmination of Mogul power and the beginning of its decay.

Vasco da Gama, the Portuguese explorer, visited India first in 1498, and for the next hundred years the Portuguese had a virtual monopoly on trade with the subcontinent. Meanwhile, the English founded the East India Company, which set up its first factory at Surat in 1612 and began expanding its influence, fighting against the Indian rulers and the French, Dutch and Portuguese traders simultaneously.

Bombay, taken from the Portuguese, became the seat of English rule in 1687. The defeat of French and Mohammedan armies by Lord Clive in the decade ending in 1760 laid the foundation of the British Empire in India. From then until 1858, when the administration of India was formally transferred to the British Crown following the great mutiny of native troops in 1857, the East India Company was constantly occupied with the suppression of native uprisings and the extension of British rule.

After World War I, in which even the Mohammedan states of India sent troops to fight beside the Allies, Indian nationalist unrest rose to new heights under the leadership of a little Hindu lawyer, Mohandas K. Gandhi, called Mahatma Gandhi. His tactics, of a politico-religious nature, called for non-violent revolts against British authority. He soon became the leading spirit of the all-India Congress Party, which was the spearhead of Indian revolt against British rule. In 1919 the British gave added responsibility to Indian officials, and by an act passed in 1935 India was given a federal form of government and a measure of self-rule.

During the 1940's the policy of both the wartime coalition government of Britain and later the Labour Government envisaged an unpartitioned India as a self-governing federal dominion including both British India and the native states. In 1942, with the Japanese pressing hard on the eastern borders of India, the British war cabinet decided to send Sir Stafford Cripps to India to try to reach a political settlement with nationalist leaders. The mission failed. Shortly thereafter the Congress Party took the position that the British must quit India. In August 1942, fearing mass civil disobedience, the Government of India carried out widespread arrests of Congress leaders including Gandhi, Jawaharlal Nehru and Maulana Abul Kalam Azad, president of the Congress Party. Sections of the nationalist movement, mostly under the leadership of the socialist wing, went underground.

Gandhi was released in May, 1944, and other leaders later. Negotiations for a settlement were resumed and they proved fruitless until the British Labour Government sent a cabinet mission to India in 1946 consisting of Lord Pethick-Lawrence, A. V. Alexander and Cripps. The mission obtained the agreement of the Congress Party and Mohammed Ali Jinnah's Moslem League to a long-term plan for a constitution based on three separate groups of provinces with a minimal center. However, agreement was not reached on an interim government and the Moslem League later reverted to its position of unconditional partition. Finally, in February, 1947, the Labour Government announced its determination to transfer power to "responsible

Indian hands" by June, 1948, even if a constitution had not been worked out.

With the appointment at the same time of Lord Mountbatten as Governor General, events moved swiftly. By early June, 1947, agreement was reached on the partitioning of India along religious lines (a plan previously opposed by the predominant Hindus and by Britain) and on the splitting of the provinces of Bengal and the Punjab, which the Moslems had claimed in their entirety.

The Indian Independence Act, passed quickly by both houses of the British Parliament, received royal assent on July 18, 1947, and on Aug. 15 the Indian Empire, united under British rule for almost a century, passed into history.

Under the leadership of Pandit Jawaharlal Nehru, the new nation quickly took its place in world councils as a self-governing state. At home the nation pursued a policy of integration and reorganization designed to place effective power in the hands of the central government, which was faced at the outset by widespread communal rioting climaxed by the assassination of Gandhi, the great Hindu spiritual leader, on Jan. 30, 1948.

**GOVERNMENT AND DEFENSE.** India is now a sovereign republic within the Commonwealth of Nations—a status approved by the other Commonwealth nations at London in April, 1949, on the condition that India recognize the King as head of the Commonwealth. Under the constitution adopted by the Constituent Assembly on Nov. 26, 1949, India has a parliamentary type of government. The

bicameral parliament is composed of the Council of States (216 members—204 chosen by constituent states and 12 by the President) and the House of the People (497 members—489 elected directly by popular vote for 5-year terms and 8 chosen by the President). The President is elected for a five-year term by an electoral college composed of parliament and the elected members of the state legislatures. The cabinet, headed by the prime minister, administers the government and is collectively responsible to the House of the People. The constituent states have their own governors and popularly elected legislatures.

In national elections held between Oct. 1951 and Feb. 1952, the Congress party won 363 of the 489 elective seats in the House of the People, Independents 36, Communists and allies 27, Socialists 12, others 51.

**Native States.** Most of the 560-odd native states and subdivisions of pre-1947 India acceded to the new nation, and the central government pursued a vigorous policy of integration. This took three forms: (1) merger into adjacent provinces, (2) conversion into centrally administered areas and (3) grouping into unions of states. The unions of states and Hyderabad, Mysore and Kashmir were assimilated to the level of provinces, with fully representative forms of government, subject to the power of the central government.

The status of the large princely state of Jammu and Kashmir on the northwest frontier is in dispute with Pakistan. It is 85 per cent Moslem, but its Hindu ruling

## POLITICAL SUBDIVISIONS OF REPUBLIC OF INDIA, 1954

	Area, sq. mi. (approx.)	Population, census 1951		Area, sq. mi. (approx.)	Population, census 1951
<b>Provinces (Governors' States)</b>			<b>Travancore-Cochin</b>		
Andhra .....	67,000	21,282,000		9,144	9,280,425
Assam .....	85,012	9,043,707*	<b>Centrally Administered Areas (Chief Commissioners' States)</b>		
Bihar .....	70,330	40,225,947	Ajmer .....	2,417	693,372
Bombay .....	111,434	35,956,150	Bhopal .....	6,878	836,474
Madhya Pradesh ..	130,272	21,247,533	Coorg .....	1,586	229,405
Madras .....	60,790	35,734,002	Delhi .....	578	1,744,072
Orissa .....	60,136	14,645,946	Himachal Pradesh ..	10,904	1,109,466
Punjab .....	37,378	12,641,205	Kutch .....	16,724	567,606
Uttar Pradesh ..	113,409	63,215,742	Manipur .....	8,628	577,635
West Bengal† ..	30,775	24,810,308	Tripura .....	4,032	639,029
<b>States and Unions of States (Rajpramukh States)</b>			Vindhya Pradesh ..	23,603	3,574,690
Hyderabad .....	82,168	18,655,108	<b>Chief Commissioner's Territory</b>		
Madhya Bharat ..	46,478	7,954,154	Andaman and Ni-		
Mysore .....	29,489	9,074,972	cobar Islands ..	3,215	30,971
Patiala and East					
Punjab (Pepsu) ..	10,078	3,493,685			
Rajasthan .....	130,207	15,290,797			
Saurashtra .....	21,451	4,137,359			

\* Excluding tribal areas with estimated population of 580,000. † Excluding centrally administered Chandernagore (area 4 sq. mi., population, 1948 est., 44,800), transferred from France to India in May 1950.



prince acceded to India, which took over administration following invasion by Moslem troops in late 1947. The U. N. Security Council voted on April 21, 1948, to hold a plebiscite in the area, but, largely because of mutual distrust between India and Pakistan, arrangements have not been made for holding it.

**Defense.** The President has supreme command of the armed forces, and the defense minister is responsible to parliament for the army, the navy and the air force, each under its own chief of staff and commander in chief.

The army has three territorial commands—southern, eastern and western—with headquarters at Poona, Ranchi and Delhi, respectively. On Jan. 1, 1954, the navy had 1 cruiser, 3 destroyers, 8 frigates and escort craft and other smaller craft.

#### SOCIAL AND ECONOMIC CONDITIONS.

**Education.** Expansion and modernization of all branches of education is under way, with emphasis on technological training. About 82% of the population was illiterate in 1949. In 1949-50 there were 206,270 recognized primary schools with 17,450,000 pupils; 19,705 secondary schools, 4,718,000 pupils; 48,730 vocational schools, 1,395,000 pupils; 28 teaching and affiliating universities, 351,000 students. English is being replaced as the language of instruction by Indian languages.

**Agriculture.** More than 200,000,000 acres are under cultivation, but India probably will continue to be a food-deficit area for several years. Rice is the staple food crop; cotton, tea and jute are important cash crops. Final production estimates for the crop year 1952-53 included rice, 35,698,000 metric tons (paddy); wheat, 5,861,000 tons; barley, 2,707,000 tons; tea, 282,000 tons; sesame, 458,000 tons; cottonseed, 1,290,000 tons; cotton (lint), 607,000 tons; jute, 352,000 tons.

Livestock in 1951 included 42,584,000 buffalo, 130,298,000 other domestic cattle, 39,975,000 sheep, 47,121,000 goats and 4,173,000 pigs.

**Manufacturing.** The republic retained almost all of the industrial facilities of British India and is among the ten leading industrial nations of the world. Cotton and jute manufacturing are the two largest industrial activities, the former concentrated largely in Bombay and the latter in Calcutta. The provinces of West Bengal and Bombay are the two most important areas of industrial concentration, with Madras ranking third in importance. In 1953, cotton mills produced 682,800 metric tons of cotton yarn and 4,476,000,000 meters of cloth. Processing of sugar is of great importance; raw sugar production totaled 1,588,000 metric tons in the 1952-53 season plus 3,360,000 tons of *cane gur* for direct

consumption. About 90 per cent of the world's supply of jute is processed in the republic. The iron and steel industry is being expanded; in 1952, 1,800,000 metric tons of pig iron and ferroalloys and 1,536,000 tons of raw steel were produced. Production of silk and woolen goods, vegetable oils, colr yarn, paper, matches, salt, cement, leather and shoes, and heavy chemicals is also important.

**Communications.** The division of the British Indian railway system in 1947 gave the republic 33,865 miles of track, all under government control. The chief ports are Bombay and Calcutta. According to *Lloyd's Register*, the merchant marine had 195 steamers and motor ships (100 tons and over) aggregating 487,707 gross tons on June 30, 1953. Roads in 1953 totaled 255,000 miles. In 1952, airlines flew approximately 250,000,000 passenger-miles.

**Trade.** India is primarily an importer of finished manufactured goods and an exporter of raw materials and semimanufactured products. Recent trade data are as follows (in millions of rupees):

	1950-51	1951-52	1952-53*
Exports	6,014	7,328	5,736
Imports	6,089	9,676	6,537

\* Provisional figures.

The leading customers in 1951-52 were Britain (26%), the U. S. (18%), Australia (6%), Pakistan (6%) and Burma (3%). Leading suppliers included the U. S. (30%), Britain (16%), Pakistan (12%) and Egypt (4%). Leading exports were jute manufactures (39%), tea (13%) and cotton manufactures (8%). Main imports included cotton and waste, machinery, grain, pulse and flour.

**Finance.** The 1954-55 budget provided for ordinary revenue of Rs.4,410,000,000. After providing for ordinary and capital expenditures, the estimated overall deficit was Rs.2,500,000,000. The public debt on March 31, 1953, was Rs.28,359,000,000, most of which was held internally.

**NATURAL FEATURES AND RESOURCES.**  
**CLIMATE.** The Indian republic contains a large part of the great Indo-Gangetic plain which extends from the Bay of Bengal on the east to the Afghan frontier and the Arabian Sea on the west. This plain is the richest and most densely settled part of the subcontinent, containing more than half the population. Another distinct natural region is the Deccan, a plateau of 2,000 to 3,000 feet elevation, occupying the southern or peninsular portion of the subcontinent. In several regions, the Deccan is quite mountainous.

Forming a part of the republic are several groups of islands—the Laccadives (14 islands totaling about 80 sq. mi.) in the Arabian Sea; the Andamans (204 islands totaling 2,508 sq. mi.); and the Nicobars



(19 islands totaling 635 sq. mi.) in the Bay of Bengal.

India's three great river systems, all rising in the Himalayas, have extensive deltas. The Ganges flows south and then east for 1,540 miles across the northern plain to the Bay of Bengal; part of its delta, which begins 220 miles from the sea, is within the republic. The Indus, starting in Tibet, flows northwest for several hundred miles in Kashmir before turning southwest toward the Arabian Sea; it is important for irrigation in Pakistan. The Brahmaputra, also rising in Tibet, flows eastward first through India and then south into Pakistan and the Bay of Bengal.

**Minerals.** The republic has rich mineral resources. The most valuable mineral is coal, deposited throughout most of the nation; production in 1953 was approximately 36,400,000 metric tons. Manganese ore (1,291,800 tons in 1952) is mined in Madhya Pradesh, and gold in Orissa.

Assam and the Punjab produce oil. Other minerals include iron ore, monazite, diamonds, magnesite, uranium, zircon, silver, graphite, gypsum, tungsten ore and sapphires.

**Climate.** India's climate varies from temperate in the north to tropical in the south, where temperatures are almost constant the year around. During the November-February cool season, northern India has a climate like that of the Riviera. From March to June steadily rising temperatures reach a peak sometimes as high as 115°, and then comes the southwest monsoon. Rainfall is heavy, averaging 50 to 60 inches in Assam and reaching 500 inches in the Assamese Garo hills.

## Pakistan

(Member of Commonwealth of Nations)

Area: 364,737 square miles.

Population (census 1951): 75,635,496

(Moslem, 86%; Hindu, 13%; others, 1%).

Density per square mile: 207.4.

Governor General: Ghulam Mohammed.

Prime Minister: Mohammed Ali.

Principal cities (census 1951): Karachi, 1,006,416 (capital); Lahore, 849,333 (Punjab manufacturing center); Dacca, 273,459 (capital, East Pakistan); Hyderabad, 241,801 (capital, Sind); Rawalpindi, 236,977 (military center).

Monetary unit: Pakistani rupee.

Principal languages: English, Bengali, Punjabi, Urdu, Hindi.

**HISTORY.** Pakistan, a self-governing member of the Commonwealth of Nations and one of the two successor states to British India, is the world's largest and most important Moslem state.

The history of Pakistan prior to 1947 is principally that of India. (See India.) Its creation was to a large extent attributable to Mohammed Ali Jinnah, who envisaged

and pressed for the idea of a predominantly Moslem state carved out of the Moslem areas of British India. Upon the transfer of power on Aug. 15, 1947, Jinnah became the first governor general; he died on Sept. 11, 1948, and was succeeded by Khwaja Nazimuddin. The latter became Prime Minister upon the assassination of Liaquat Ali Khan, Oct. 16, 1951; he was replaced on Apr. 17, 1953, by Mohammed Ali.

**GOVERNMENT AND DEFENSE.** Pakistan has a provisional government federal in nature. The governor general represents the Crown and is advised by the prime minister and his cabinet, who are responsible to the constituent assembly, which has both legislative and constitution-making powers.

**Provinces.** Pakistan consists of two large sectors approximately 1,000 miles apart, separated by the Republic of India: in the northwest, Sind, Baluchistan, the North-West Frontier Province, western Punjab, the princely state of Bahawalpur, and a few other small native states; in the northeast, eastern Bengal and the Sylhet district of Assam. It contains large communal minorities of Hindus and Sikhs. Over half of the nation's population is concentrated in east Bengal, which contains only 15 per cent of the total area.

**Defense.** In the division of the British Indian Army, Pakistan received 20 regiments, which, with levies and contributions of native princes, made a total army strength of about 250,000. The Royal Pakistan Navy in 1954 had a force of 4 destroyers, 2 sloops, 2 frigates, 6 mine sweepers and several smaller vessels. The air force has 1 transport and 2 fighter squadrons.

**SOCIAL AND ECONOMIC CONDITIONS.** Literacy was barely 13.2 per cent, according to the 1951 census. In 1950, it was reported that there were 38,453 primary schools, 4,963 secondary schools, 1,649 high schools and 3 universities.

Pakistan, poor in industry and natural resources, is mainly an agricultural nation. Upwards of 45,000,000 acres are under cultivation, almost half of which are irrigated, largely in Sind and west Punjab in western Pakistan. The Punjab contains important wheat-growing areas, and eastern Pakistan is rich in jute, rice and tea. Production estimates for the crop year 1952-53 included wheat, 3,112,000 metric tons; rice, 12,416,000 tons (paddy); maize, 381,000 tons; barley, 139,000 tons; tea, 24,500 tons; jute, 1,238,000 tons; cotton (lint), 320,000 tons; cottonseed, 668,000 tons. In 1951-52 there were 6,570,000 sheep, 4,980,000 buffalo, 24,300,000 cattle, (1947-48) 454,000 camels and 470,000 horses.

Pakistan is an exporter of agricultural products and an importer of manufactured

commodities. Recent statistics are as follows (in millions of Pakistani rupees):

	1950-51	1951-52	1952-53
Exports	2,235	2,300	1,534
Imports	1,520	1,929	1,713

Chief exports in 1951-52 were raw jute (53%) and raw cotton (32%). Leading customers were India (27%), Britain (13%) and Japan (10%); leading suppliers, Japan (24%), Britain (19%) and India (16%). Important imports included cotton yarns and manufactures (33%), machinery and vehicles (14%) and metals and ores (8%).

Development of a unified nation is retarded by the fact that communication between east and west Pakistan is possible only through a thousand miles of Indian territory or by a long sea voyage. In the division of the British Indian railways, Pakistan received 6,659 miles of track. Western Pakistan has an estimated road mileage of 46,000, about half of which is suitable for motor traffic. Eastern Pakistan has few roads for motor vehicles, but there are about 2,800 miles of waterways navigable by small steamers. On June 30, 1953, the merchant marine had 55 vessels (100 tons and over) aggregating 167,548 gross tons. Karachi, chief port, is the distribution center for north India and has the most important airport on the subcontinent. Chittagong is being developed as a port for eastern Pakistan.

Pakistan's industries supply only a small part of the national requirements. The most important manufacturing area is in the vicinity of Lahore in the Punjab. Industries include cotton ginning, spinning and weaving, sugar refining, cement making, flour milling, railway and engineering workshops and two petroleum refineries.

The preliminary budget for the fiscal year 1953-54 (which includes the railway budget) estimated revenue at Rs.1,448,500,000 and expenditure at Rs.1,447,100,000.

**NATURAL FEATURES AND RESOURCES; CLIMATE.** Almost all of Sind and the west Punjab are a continuation of north-central plains leading up to rugged mountains in the north and west which traverse Baluchistan and the North-West Frontier Province. Eastern Pakistan is a low-lying, flat country with elevation averaging not more than 600 feet above sea level.

Mineral resources are limited. Production in 1953 included petroleum, 193,200 metric tons; coal and lignite, 588,000 tons; (1952) chromite, 17,500 tons; gypsum, 29,700 tons.

Western Pakistan has a brisk, cool season between November and March, with average mean temperature of about 60°, and an extremely warm period between April and November, with an average mean of

85°. Rainfall averages about 10 inches a year, of which Sind may receive as little as 6.3 in. Eastern Pakistan is within the range of the summer monsoon, with average annual rainfall of 85 in. The average maximum temperature varies between 75° and 100° April to June; the minimum, between 45° and 60° November to January.

## OCEANIA

### Australia, Commonwealth of

(Member of Commonwealth of Nations)

Area: 2,974,581 square miles.

Population (est. Dec. 31, 1953): 8,917,763 (excluding full-blooded aborigines, estimated at 50,000).

Density per square mile: 3.0.

Ruler: Queen Elizabeth II.

Governor General: Field Marshal Sir William Slim.

Prime Minister: Robert Gordon Menzies.

Principal cities (est. Dec. 31, 1952): Sydney, 1,621,040 (seaport, wool market); Melbourne, 1,393,000 (seaport, wool, wheat); Brisbane, 469,000 (seaport, industrial center); Adelaide, 459,000 (seaport); Perth, 346,000 (western seaport); Canberra, 26,732 (capital).

Monetary unit: Australian pound (£A).

Language: English.

Religions (census 1947): Anglican, 39.0%; Roman Catholic, 20.7%; Presbyterian, 9.8%; Methodist, 11.5%; other Christians, 7.1%; others, 11.9%.

**HISTORY.** Australia was the last continent to be discovered. The first Europeans to land were the Dutch, who sailed into the Gulf of Carpentaria in March, 1606. Later in the same year, Luis Vas de Torres, a Spaniard, sailed through the strait subsequently named for him, and may have touched at several points on the north coast. In 1642 Abel Tasman (for whom Tasmania was named) sailed from west to east along the southern shore and proved that Australia was not a part of the Antarctic continent. The continent was called New Holland until about 1850.

In 1770 Captain James Cook, after visiting New Zealand, sailed to the east coast of New Holland and landed south of the present city of Sydney. His account of the country led to its being claimed and settled by Great Britain.

The first settlement, made in 1788 at Botany Bay, was founded as a penal station for criminals from England. Transportation of criminals was virtually suspended in 1839, and Australia had comparatively few white settlers until gold was discovered in Victoria in 1851, after which immigrants poured in. By 1860 all the states (then separate colonies) except Western Australia had been granted responsible government.

On January 1, 1901, the six Australian states united to form the Commonwealth of Australia. The Commonwealth sup-



ported Great Britain wholeheartedly in World War I, sending 329,883 troops abroad, all volunteers. Australia again declared war on Germany September 3, 1939, and became a vast base for U. S. troops. Gen. Douglas MacArthur set up his headquarters there on March 17, 1942.

In the general elections held August 21, 1943, Prime Minister John Curtin's Labour government was confirmed in office. Curtin died July 5, 1945, and was succeeded by Joseph B. Chifley, also of the Labour party. The Labour government was defeated by the Liberal-Country-party coalition in general elections held Dec. 10, 1949, and Robert Gordon Menzies, the Liberal leader, became Prime Minister on Dec. 15. Elections held April 28, 1951, and May 29, 1954, were again won by the coalition, although by narrower margins.

Australia was visited in 1954 by Queen Elizabeth II and the Duke of Edinburgh.

**GOVERNMENT AND DEFENSE.** Australia, a self-governing member of the Commonwealth of Nations, is a union of 6 states (New South Wales, Victoria, Queensland, South Australia, Western Australia, Tasmania) and 2 territories (Northern Territory, Australian Capital Territory).

Legislative power is vested in a Parliament of 2 houses—the Senate with 60 members (10 for each state), the House of Representatives with 121 members (plus 2 without vote who represent the territories) elected on a population basis.

Executive power nominally is exercised by the Queen, through a Governor General, who is appointed by her. Actually, however, the Commonwealth is administered by the Prime Minister and the Cabinet members, who are responsible to the House of Representatives and must enjoy its confidence. The House of Representatives continues its sessions for three years from the date of its first meeting, unless sooner dissolved. Senators are chosen for six years, but the Senate may be dissolved in the event of prolonged disagreement with the House. The party alignment in the House after the elections of May 29, 1954, was as follows: Liberal-Country-party coalition 64; Labour 57 (and 2 non-voting members).

Each of the states is headed by a governor who is appointed by the Queen and is advised by the Prime Minister and his Cabinet; the latter actually administer the government. As in the U. S., the state governments retain the powers not specifically delegated to the federal government. The Northern Territory is administered by the federal government.

Federal judicial power is vested in a Federal Supreme Court of 7 justices, appointed by the Governor General in Council. Each state has its own judicial system.

Compulsory military service was reintroduced in 1951. The army then had upwards of 20,000 men and the air force had about 10,000 men. In Dec. 1953, the navy had 2 aircraft carriers, 2 cruisers, 5 destroyers, 18 frigates and escort vessels and numerous smaller craft. Army, navy and air units were sent to Korea. During World War II, 350,000 men served overseas.

**SOCIAL AND ECONOMIC CONDITIONS.** Normal primary education is provided free by the states. In 1950 there were 7,969 state schools, with average attendance of 869,906, and 1,835 private schools, with average attendance of 281,056. The 9 universities had a total enrollment of 29,641 in 1952. Illiteracy is almost unknown among the European population.

Australia is the world's chief producer of wool, and sheep farming is the Commonwealth's most important single industry. About 55 per cent of Australia's total area is suitable (mining excepted) only for pastoral pursuits. On March 31, 1953, there were 123,072,000 sheep, 15,247,000 cattle, 993,000 pigs and 895,000 horses. The production of wool in 1952-53 was 571,913 long tons (greasy); butter, 167,581 metric tons; cheese, 46,786 tons. Production of meat averages 1,000,000 long tons annually; it was 1,154,424 tons in 1952-53.

The most important crop is wheat; the areas of heaviest production are in South Australia and New South Wales, but production in Western Australia is rapidly increasing. Production of wheat in 1952-53 was 5,228,782 long tons; oats, 778,989 tons; barley, 782,253 tons; maize, 124,172 tons.

Sugar and cotton are grown in Queensland and New South Wales, tobacco in northeast Victoria, and vines chiefly in South Australia and Victoria.

New South Wales is the leading industrial state. Power for industry is derived almost entirely from coal. In 1951-52 there were 45,843 factories, employing 977,773 workers and producing net output valued at £A1,023,976,000 and gross output valued at £A2,633,674,000. Steel production was 2,049,237 long tons in 1953; pig iron, 1,736,854 tons.

Trade statistics for three years (in millions of Australian pounds) are as follows:

	1950-51	1951-52	1952-53
Exports	981.8	669.0	871.3
Imports	741.4	1,050.1	514.1

In 1952-53 the leading customers were Britain (41%), Japan (10%), France (9%) and the U. S. (7%). Leading suppliers were Britain (42%), the U. S. (17%), Indonesia (4%) and Canada (4%). Chief exports were wool (46%), meat (8%), wheat (6%), flour (4%) and lead (3%).

The principal ports are Sydney, Melbourne and Adelaide. Railway mileage in



1951 totaled 27,000; roads, over 500,000. Civil aviation is under Commonwealth control. The merchant marine had 354 ships of 100 tons and more, aggregating 573,965 gross tons, on June 30, 1953. In March 1953 there were 1,452,878 telephones and 2,010,595 radio receiving licenses and in Dec. 1953, 1,146,000 automobiles and 593,000 commercial vehicles.

Recent public finance data on consolidated account are as follows (in millions of Australian pounds):

	1951-52	1952-53	1953-54*
Revenue	1,016.8	1,040.1	986.8
Expenditure	1,016.8	1,026.7	986.5

\* Budget estimate.

The public debt (federal and state) on Dec. 31, 1953, was £A3,521,389,000 (federal only: £A1,924,409,000).

**NATURAL FEATURES AND RESOURCES; CLIMATE.** Australia is approximately equal in area to the United States and is more than three-fourths the size of Europe.

Along the east coast, ranges of mountains run from north to south, reaching their highest point in Mt. Kosciuszko (7,352 ft.). The western half of the continent is occupied by a desert plateau which rises into barren, rolling hills near the west coast. It includes the Great Victoria Desert, to the south, and the Great Sandy Desert to the north. The island of Tasmania (26,215 sq. mi.) lies off the southeastern coast.

Australia possesses considerable mineral resources. The value of mineral output in 1952 was £A136,298,000. Most important is gold (1953 output: 1,075,080 ounces). Second in importance is coal, mined near Sydney, Brisbane and in eastern Tasmania (1953 output: 18,441,000 long tons, plus 8,257,000 tons of brown coal). The Broken Hill mines in New South Wales are one of the most valuable silver-lead-zinc areas in the world. Silver production in 1952 was 11,257,000 ounces; (1953) lead, 269,296 long tons; zinc, 239,069 tons. Other important minerals in 1953 included tin (1,494 tons), copper (37,364 tons), iron ore (3,298,718 tons) and uranium.

Forest products include timber (rough sawn), eucalyptus oil, sandalwood oil, tan bark and yacca gum. Sea products include *bêche-de-mer*, oysters, pearls, pearl shell, tortoise shell and agar-agar.

**Climate.** The northern third of the country lies within the torrid zone and the remainder within the south temperate zone. The coolest portion of the mainland (Victoria) is not unlike Spain and south Italy. The average temperature for Australia as a whole is 70°, and the northern coastal areas average 82°. Only in the center of the continent does the annual range of temperature exceed 30°. Large areas of the continent receive less than 10 inches of rain. The eastern highlands and Victoria are the best-watered regions.

Norfolk Island, under Commonwealth administration since 1914, lies about 800 miles east of New South Wales. It enjoys a delightful subtropical climate. Citrus fruits, bananas and coffee are grown.

**PAPUA AND NEW GUINEA, TERRITORY OF—Status:** Australian territory and U. N. trust territory.

Administrator: J. K. Murray.

Capital: Port Moresby (population 3,000).

Chief exports: copra, rubber, gold.

Agricultural products: coconuts, rubber, copra, cacao.

Minerals: gold, silver, platinum.

Effective July 1, 1949, the Australian territory of Papua and the U. N. trust territory of New Guinea were joined in an administrative union by act of the Australian parliament. Provision is made for an executive and a legislative council.

Papua, comprising the southeastern part of the island of New Guinea, and the islands of the D'Entrecasteaux, Louisiade and nearby groups, was annexed by Queensland in 1883 and by the British Crown in 1888. It came under the control of the Australian Commonwealth in 1901 and became the Territory of Papua in 1906. Japan invaded Papua in early 1942, but in Dec. 1942, Australian control was restored.

In 1950, there were 4,400 nonnatives in the territory. About 280,000 acres of land have been leased, chiefly by planters, and more than 62,000 acres are cultivated.

The U. N. trust territory of New Guinea, comprising the northern section of eastern New Guinea (93,000 sq. mi.) was mandated in 1920 by the League of Nations to the government of the Commonwealth of Australia, together with the Bismarck Archipelago (New Britain, New Ireland and adjacent islands), the Admiralty Islands with several outlying groups, and the northern Solomon Islands (Bougainville and Buka). It was placed under United Nations trusteeship Dec. 13, 1946, with Australia as the administering power. Japanese troops occupied much of the territory in 1942-45. In 1950, there were 8,700 nonnatives in the territory.

**FIJI—Status:** Colony.

Governor: Sir Ronald H. Garvey.

Capital: Suva (population 25,395).

Foreign trade (1953): exports, £13,180,698; imports, £10,548,627. Chief exports: sugar (51%), gold, coconut oil.

Agricultural products: sugar (exports 1953: 177,870 long tons), coconut oil (16,251 tons), copra, bananas, molasses.

Mineral: gold (1953: 70,466 oz.).

Fiji colony consists of an archipelago of from 200 to 250 islands in the South Pacific Ocean about 1,740 miles northeast of Sydney, Australia. The larger islands, including Viti Levu (4,053 sq. mi.) and Vanua Levu (2,130 sq. mi.) are mountainous and of volcanic origin. The archipelago was

ceded to Great Britain by the native ruler in 1874.

The population in 1952 included 135,877 Fijians and 148,802 Indians. Importation of the latter to work the sugar plantations has led to important social and economic changes. There has been almost no intermarriage between Fijians and Indians, and considerable ill feeling has developed between them.

During World War II, the archipelago was an important air and naval station on the route from the U. S. west coast and Hawaii to Australia and New Zealand.

Fiji has a pleasant climate, with the temperature seldom leaving the 60°-90° range; rainfall is heavy in the southeastern three quarters of the archipelago, averaging 10-12 ft. annually, but is almost nil in the northwestern quarter.

**TONGA (FRIENDLY ISLANDS)—Status:** Protected state.

Ruler: Queen Salote Tupou.

Foreign trade (1953): exports, £1,202,162; imports, £918,319. Chief export: copra.

This native Polynesian kingdom in the Pacific came under British protection through the Anglo-German agreement of November 14, 1899. The native queen is advised by a British Agent; the 21-member native Legislative Council is partly elected and partly nominated. The only important products are copra and bananas.

**PITCAIRN ISLAND—Status:** Colony.

Located in the South Pacific, about midway between Australia and South America, Pitcairn has an area of 2 square miles. It was settled in 1790 by British mutineers from the ship "Bounty," commanded by Capt. Bligh. Overpopulation forced removal of the settlement to Norfolk Island in 1856, but about 40 soon returned. The island is administered by the Governor of Fiji through an elected council headed by a chief magistrate. The population in June 1951 was 134.

**NAURU—Status:** U. N. trust territory.

This small island (8 sq. mi.), an important source of phosphate (exports 1950-51: 950,800 tons) was annexed by Germany in 1898 and was placed under joint Australian, New Zealand and British mandate after World War I. In 1947 it was placed under U. N. trusteeship, with the same three administering powers. It lies about 2,215 miles northeast of Sydney.

## New Zealand

(Member of Commonwealth of Nations)

Area: 103,416 square miles (104,242 including outlying and annexed islands).

Population (est. March 31, 1954): 2,087,740 (1951: European, 92.3%; Maori, 5.9%; others, 1.8%).

Density per square mile: 20.2.

Ruler: Queen Elizabeth II.

Governor General: Lt. Gen. Sir Willoughby Norrie.

Prime Minister: Sidney G. Holland.

Principal cities (est. Apr. 1, 1953): Auckland (greater), 350,500 (seaport and naval base); Christchurch, 182,800 (cereals, stock raising); Wellington, 137,600 (capital); Dunedin City, 97,900 (textiles).

Monetary unit: New Zealand pound (£NZ).

Language: English.

Religions (census 1951): Church of England, 37.5%; Presbyterian, 22.3%; Roman Catholic, 13.6%; Methodist, 8.1%; Baptist, 1.6%; others, 16.9%.

**HISTORY.** New Zealand, about 1,250 miles east of Australia, consists of two main islands and a number of smaller outlying islands so scattered that they range from the tropical to the antarctic. The islands, which have approximately the area of Italy, were discovered and named New Zealand in 1642 by Abel Tasman, a Dutch navigator. Captain James Cook explored them in 1769 and after him came many other sailors, sealers, whalers and traders. English missionaries landed in 1814 but made slow progress. On Jan. 22, 1840, to head off a possible French move to claim New Zealand, Britain formally annexed it.

New Zealand was granted self-government in 1852, a full parliamentary system and ministries in 1856 and dominion status on Sept. 26, 1907. Meanwhile from 1861 to 1871 there was fierce intermittent fighting with the native Maoris. Gold was first discovered in 1853.

New Zealand's Labour party came to power in 1935 for the first time, with Michael J. Savage as Prime Minister. The party began a program of liberal economic and social measures and it was again successful in the 1938 elections.

In World War II, New Zealand troops fought in Egypt, Greece, Crete, North Africa, Sicily and Italy, and the islands served as a major base for U. S. troops in the Pacific war.

After 14 years in power, the Labour party was defeated at the general election of Nov. 30, 1949, and the National party took office with Sidney G. Holland as Prime Minister.

**GOVERNMENT AND DEFENSE.** New Zealand is a self-governing member of the Commonwealth of Nations. The Queen is represented by a Governor General named by the Queen after consulting with the New Zealand government. Legislative power is vested in the eighty-member House of Representatives. The former upper house (Legislative Council) was abolished effective Jan. 1, 1951. The House elected on Sept. 1, 1951, had 50 National-party members and 30 Labour-party members.

Military service was voluntary until July 22, 1940, when compulsory service was in-



stituted. Service outside New Zealand, hitherto voluntary, also became obligatory during World War II. At full mobilization, New Zealand had 157,000 men in the armed forces and 124,000 in the Home Guard. Almost one-third of the whole male population of military age served overseas. The peacetime force is stabilized at 11,000 men. Naval forces include 2 cruisers, 6 escort destroyers and a number of mine sweepers.

Navy and volunteer army forces were dispatched to Korea in 1950, and compulsory service was readopted. A mutual defense pact with the U. S. was signed Sept. 1, 1951.

**SOCIAL AND ECONOMIC CONDITIONS.** State education is free and compulsory between the ages of 7 and 15. More than half the Maoris attend the regular public schools; the remainder attend missionary and native village schools. In Dec. 1951 there were 2,333 primary schools with 321,746 students and 271 secondary and technical schools with 56,640 students. University students numbered 10,428. About 10 per cent of the national budget is expended on education.

Primarily a grazing country, New Zealand is one of the world's largest exporters of mutton, lamb, wool, butter and cheese. In 1953, livestock included 36,192,935 sheep, 5,445,963 cattle and 627,830 hogs. Wool production for 1952-53 was 418,000,000 lbs. (greasy basis). Outside of grass, the chief crop is wheat (4,525,298 bushels in 1952-53). Other crops are oats, barley, potatoes, onions, tobacco, fruits and vegetables. Butter production in 1952-53 was 200,027 long tons; cheese, 107,448 tons; meat, 575,563 tons.

The chief industries of New Zealand are freezing of meat and making of butter, cheese and condensed milk. Others of major importance are electricity generation, saw milling and clothing manufacture.

In 1951-52 there were 8,547 factories with 144,370 workers. Gross output was valued at £NZ431,038,354.

Trade statistics for three years (in millions of New Zealand pounds) are as follows:

	1951	1952	1953
Exports	247.6	240.6	235.6
Imports	206.5	252.4	179.8

In 1953, New Zealand's leading customers, by value, were Britain (67%), the U. S. (8%) and France (7%). Leading exports were wool (36%), dairy products (33%) and meat (20%). Leading suppliers were Britain (57%), Australia (14%) and the U. S. (7%).

The merchant marine had 170 ships (100 tons and over), aggregating 248,101 gross tons, on June 30, 1953. Government-owned railway mileage in 1951 was 3,531; highway mileage in 1952 was 12,725.

Recent government financial data on ordinary account are as follows (in millions of New Zealand pounds):

	1951-52	1952-53	1953-54
Revenue	180.8	177.8	182.3
Expenditure	168.2	174.5	180.5

The public debt on March 31, 1954, was £NZ682,361,622, excluding £24,100,200 on which interest payments had been suspended since 1931 by agreement with the British government.

**NATURAL FEATURES AND RESOURCES; CLIMATE.** New Zealand's two main components are North Island and South Island, separated by Cook Strait, which varies from sixteen to 190 miles in width. North Island (44,281 sq. mi.) is 515 miles long and volcanic in its south central part. It contains many hot springs and beautiful geysers. In the southern part of North Island is Lake Taupo (238 sq. mi.), in the center of a pumice-covered plateau.

South Island (58,093 sq. mi.) has the Southern Alps along its west coast, with Mt. Cook (12,349 feet) the highest point in New Zealand.

Principal minerals are coal (1953: 2,861,000 long tons), gold (1952: 59,151 ounces) and silver (1952: 51,016 ounces). Other minerals of importance include tungsten, pumice, silica sand, asbestos, scheelite, iron ore and phosphate. About 20 per cent of the total area is forested; 572,247,000 board feet of lumber were cut in 1953-54.

Flounder, snapper and tarakihi account for 75% of New Zealand's fishery industry. There also are extensive oyster beds.

Numerous rushing streams give New Zealand a great volume of hydroelectric power. South Island has available about 4,000,000 horsepower, and North Island 800,000. About 95 per cent of the population has access to power.

The ocean tempers New Zealand's climate, which otherwise might have great variation. The range of mean temperatures is small (at Auckland, 66.3° in January, 51.2° in July; at Wellington, 60.9° in January, 47.2° in July). Rainfall is moderate except on the western slope of the Southern Alps; it averages 45.3 inches annually at Auckland and 47.5 inches at Wellington and is heaviest in winter.

**DEPENDENCIES.** The Auckland Islands (234 sq. mi.) and Campbell Island (44 sq. mi.) are the principal outlying islands, which have a total area of 307 square miles. They are included within the geographical boundaries of New Zealand as proclaimed in 1847. The Aucklands and Campbell are uninhabited. Six hundred miles north of the Aucklands are the volcanic Kermadec Islands (13 sq. mi.), annexed in 1887.

In Polynesia a number of uninhabited islands were brought under New Zealand's



control in 1901. Rarotonga and Mangala in the Cook group total 84 square miles. Niue (or Savage Island) (115 sq. mi.) is the largest island outside the Cook group. New Zealand also administers the Ross Dependency, an antarctic region claimed by Great Britain in 1923, and the Union (or Tokelau) Islands, transferred in 1925 from the Gilbert and Ellice Islands colony.

**WESTERN SAMOA**—Status: U. N. trust territory.

Administrator: G. R. Powles.

Capital: Apia (population 10,000).

Foreign trade (1953): exports, £1,954,689 (53% to the U.K.); imports, £1,312,769 (31% from New Zealand). Chief export: cacao (47%).

Principal products: copra, cacao, bananas, tropical fruits, rubber.

The former German Samoan Islands were occupied by New Zealand troops in the opening weeks of World War I and were mandated to New Zealand by the League of Nations in 1920 as the Territory of Western Samoa. They came under U. N. trusteeship in 1947, with New Zealand continuing as the administering authority. The administrator is assisted by a legislature with a Samoan majority and a consultative Native Council. There are 9 islands, of which the largest and most populous are Savaii (703 sq. mi.) and Upolu (430 sq. mi.). They are largely mountainous but fertile. The inhabitants are Polynesian Christians.

## PACIFIC ISLANDS (British)

High Commissioner in Western Pacific: R. C. Stafford Stanley.

Island groups in the Pacific administered by the British High Commissioner in the Western Pacific include (1) Gilbert and Ellice Islands, (2) British Solomon Islands, and (3) New Hebrides Condominium (see French Overseas Territories). The High Commissioner has headquarters at Honiara, Solomon Islands.

**GILBERT AND ELLICE ISLANDS**—Status: Colony.

The islands in these groups (including the Gilbert group; the Ellice group; Ocean Island [the seat of administration], Fanning, Washington and Christmas Islands; and the Phoenix group) were proclaimed a British protectorate in 1892 and annexed as a colony in 1915. The most important product is high-grade phosphate.

Ownership of Canton and Enderbury islands in the Phoenix group was long in dispute between Great Britain and the United States until 1939, when an agreement for "use in common" was reached by the two governments. Several of the Gilbert islands were occupied by Japanese forces in World War II, and Tarawa was the scene of one of the fiercest battles in

U. S. Marine Corps history in Nov., 1943, when it was retaken from the Japanese.

**SOLOMON ISLANDS**—Status: Protectorate.

This British protectorate, lying east of New Guinea, includes the islands of Guadalcanal, Malaita, San Cristobal, New Georgia, Santa Isabel, Choiseul and numerous smaller islands. Bougainville, one of the group, is under Australian mandate. The islands, which came under British protection late in the 19th century, were the scene of several important U. S. naval and military victories during World War II. There are no native states, and administration is carried on by the High Commissioner assisted by a nominated Advisory Council. The most important products are copra and rubber.

## [Bulgaria (People's Republic)

(Blgariya)

Area: 42,741 square miles.

Population (est. 1952): 7,390,000 (1947: Bulgarian, 88%; Turkish, 9.8%; others, 2.2%).

Density per square mile: 172.9.

Chairman of Presidium: Georgi Damjanov.

Premier: Vulko Chervenkov.

Principal cities (census 1946): Sofia, 434,888 (capital, railroad center); Philippopolis (Plovdiv), 125,440 (commercial center); Stalin (Varna), 77,792 (Black Sea port); Ruschuk, 53,420 (chief Danube port); Burgas, 43,684 (Black Sea port).

Monetary unit: Lev.

Languages: Bulgarian, Turkish.

Religions: Greek Orthodox, 84.4%; Mohammedan, 13.5%; Jewish, .8%; Roman Catholic, .8%; others, .5%.

**HISTORY.** Bulgaria, with a strife-ridden political past, is an agrarian country about the size of Virginia. It sided timidly with Germany in World Wars I and II, hoping to win territory. It lost in both wars.

The first Bulgarians, a tribe of wild horsemen akin to the Huns, crossed the Danube from the north in A.D. 679, and took the province of Moesia from the Roman Empire. They adopted a Slav dialect and Slavic customs and twice conquered most of the Balkan peninsula between 893 and 1280. After the Serbs subjected their kingdom in 1330, the Bulgars gradually fell prey to the Turks, and from 1396 to 1878, Bulgaria was a Turkish province. In 1878, after the Turks had ruthlessly suppressed a Bulgar revolt, Russia forced Turkey to give the country its independence; but the European powers, fearing that Bulgaria might become a Russian dependency, intervened. By the Treaty of Berlin (July, 1878), Bulgaria became autonomous under Turkish sovereignty, with the province of Eastern Rumelia under a Christian governor.

In 1887, Prince Ferdinand of Saxe-Coburg-Gotha was elected ruler; on Oct. 5, 1908, he declared Bulgaria (and Rume-lia) an independent kingdom.

In the First Balkan War (1912-13), Bulgaria joined its neighbor states and defeated Turkey; then it bickered with Serbia and Greece over division of Macedonia and was defeated by them in the Second Balkan War, which lasted one month.

Still coveting Macedonia, Bulgaria joined Germany in World War I and lost. On Oct. 3, 1918, Tsar Ferdinand abdicated in favor of his son, who became Tsar Boris III. The Treaty of Neuilly the next year disarmed Bulgaria, reduced it to its 1878 size, and levied a heavy indemnity. Internal disorder, underground intrigue and Agrarian-Communist agitation marked the next fifteen years.

Boris assumed dictatorial powers in 1934-35. When Hitler awarded his nation Southern Dobruja, taken from Rumania in 1940, the weak but land-hungry Boris joined the Nazis in war the next year and occupied parts of Yugoslavia and Greece. Later, with the fortunes of war swinging inexorably against them, the Germans tried to force Boris to send his troops against the Russians. Boris resisted and died under mysterious circumstances on Aug. 28, 1943.

Simeon II, infant son of Boris, became nominal ruler under a regency. Three days after Russia declared war on Bulgaria on Sept. 5, 1944, Bulgaria declared war on Germany. Russian troops streamed in the next day, and under an informal armistice a coalition "Fatherland Front" cabinet was set up under Kimon Georgiev.

The Fatherland Front regime represented the Communist, Zveno, Agrarian and Social Democratic parties, but real power was in the hands of the Communists, who had active Soviet support and were ably led by Georgi Dimitrov, veteran party leader and former secretary-general of the Comintern.

This Government initiated extensive social and economic reforms, instituted a ruthless purge of war criminals and suppressed all political groups which failed to subscribe to its policies. The elections of Nov. 18, 1945, and Oct. 27, 1946, were conducted in typical Communist manner, with the Fatherland Front securing overwhelming majorities, according to official figures.

After the plebiscite of Sept. 8, 1946, which resulted in overthrow of the monarchy, and the Oct. 27 elections, the Communists quickly moved to take over the Government officially and to reduce the political opposition to complete impotence. Under the peace treaty which took effect Sept. 15, 1947, after World War II, Bulgaria's boundaries are those which existed Jan. 1, 1941, thus including Southern Dobruja. Bulgaria was to pay reparations in

the amount of \$45,000,000 to Greece and \$25,000,000 to Yugoslavia and was to make compensation for damage to Allied property in Bulgaria at the rate of 75 per cent of the cost of replacement.

The United States broke diplomatic relations with Bulgaria on Feb. 21, 1950.

**GOVERNMENT AND DEFENSE.** The constitution of 1947, modeled after the U.S.S.R.'s, provides that the unicameral National Assembly is "the supreme organ of the State." The Assembly elects a 15-member presidium, the president of which is the nominal chief of state. Governmental administration is carried on by the Premier and his Cabinet, who are responsible to the Assembly. On Feb. 4, 1948, the Communist-dominated Fatherland Front was declared the only official party.

The 1947 treaty of peace fixed the strength of the armed forces as follows: army 55,000; anti-aircraft artillery 1,800; navy 3,500; and air force 5,200 men and 90 aircraft, none of them bombers. The army was purged of all anti-Communist officers late in 1946 and has been reorganized along Soviet lines. Notwithstanding the treaty provisions, the army had an estimated strength of 175,000 in 1953.

**SOCIAL AND ECONOMIC CONDITIONS.** Elementary education is compulsory and free between 7 and 15; in 1946, 23% of the total population was illiterate. Schools in 1952 included 6,223 elementary, 243 secondary, 226 vocational training schools and 13 institutions of higher learning.

Most of the population is Greek Orthodox. Clergy of all faiths are paid by the state. The national language, Bulgarian, is closely related to Russian; both employ the Cyrillic alphabet.

Bulgaria is predominantly agrarian, with 80 per cent of the population engaged in agriculture. Because of the mountainous character of the country, however, only about 43 per cent of the land is tilled or used for pasture. Most landholdings are small, and primitive methods of cultivation predominate. More than half the cultivated area is devoted to cereals, including wheat, corn, barley, oats and rye. Other crops are tobacco, alfalfa, cotton, flax, potatoes and sugar. There are extensive vineyards in the southern valleys. In 1950 Bulgaria had 2,140,000 cattle and 1,500,000 hogs.

Industries of Bulgaria are of minor importance and with few exceptions—preparation of tobacco leaf, wines and liquors, distillation of attar of roses, and flour milling—are confined to domestic markets. All industries of any importance have been nationalized. A five-year plan (1948-53) was instituted to increase the proportion of heavy to light industry; capital expenditure of \$850,000,000 was projected.



Foreign trade necessarily consists of the exchange of agricultural products for cheap manufactures. Statistics, in billions of leva, are as follows:

	1946	1948	1950
Exports	14.94	34.10	51.62
Imports	17.51	35.20	38.57

Leading customers in 1950 were the U.S.S.R. (45%) and Czechoslovakia, Hungary, Rumania and Poland (31%). Leading suppliers were the U.S.S.R. (67%) and the four above-named satellites (31%). Tobacco was the principal export.

Although the Danube is navigable along the northern border, only a comparatively small percentage of prewar Danube ship tonnage was Bulgarian. Railroad mileage, all nationalized, totaled 2,231 in 1952; highway mileage was about 14,000 in 1950.

**NATURAL FEATURES AND RESOURCES; CLIMATE.** Two mountain ranges and two great valleys mark Bulgaria's topography. The Balkan belt crosses the center of the country, almost due east-west, rising to a height of 7,800 feet. The Rhodope range breaks off from the Balkans in the west, curves and then straightens out to run nearly parallel along the southern border. Between the two ranges is the valley of the Maritsa, Bulgaria's principal river. Between the Balkan range and the Danube, which forms most of the northern boundary with Rumania, is the Danubian tableland, traversed by several short rivers. Southern Dobruja, a fertile region of 2,900 square miles below the Danube delta, is an area of low hills, fens and sandy steppes.

Soft coal is Bulgaria's principal mineral; production in 1952 was estimated at 4,500,000 metric tons. Other mineral products include aluminum and rock salt.

Bulgaria's climate is characterized by cold winters and warm summers approaching the subtropical in the south. Rain and snowfall average twenty to forty inches a year. Temperatures at Sofia average 28° in January and 69° in July.

## Burma (Republic)

**Area:** 261,749 square miles.

**Population (est. 1953):** 19,045,000 (1941: Burmans, 60%; Shans, 7%; Chins, 2%; Kachins, 1%; Indians, 6%; Chinese, 1%; Indo-Burmans, 1%; others, 22%).

**Density per square mile:** 72.8.

**President:** Dr. Ba U.

**Premier:** U Nu.

**Principal cities (est. 1952):** Rangoon, 600,000 (capital, chief port); Mandalay, 173,263 (river port, upper Burma); Moulmein, 89,767 (seaport); Akyab, 38,663 (rice).

**Languages:** Burmese (70%), English.

**Religions:** Buddhist, 90%; Mohammedan, 3%; Hindu, 3%; Christian, 2%; others, 2%.

**HISTORY.** Lying on the eastern side of the Bay of Bengal between India, China and Siam, the Union of Burma came into existence as an independent state on Jan. 4, 1948. Since that time the new republic has held its own with difficulty against attacks on the one hand by Communist rebels seeking its overthrow and on the other by Karen insurgents seeking wider territorial autonomy.

In 1612 the British East India Company sent agents to Burma, and in the 17th and 18th centuries the Burmese stoutly resisted the efforts of British, Dutch and Portuguese traders to establish posts on the Bay of Bengal. Actual British rule dated from 1826, and in 1886 British troops forced the annexation of all Burma to India. On April 1, 1937, the British separated Burma from India and set it up as a Crown colony with its own legislature and a British governor.

For hundreds of years a battlefield of petty princes, Burma became a key battleground in World War II largely because the 800-mile Burma Road was the Allies' vital supply line to China. The Japanese invaded the country in Dec., 1941, and by May, 1942, had occupied most of it, cutting the road. In Aug., 1942, the Japanese set up a puppet government under Dr. Ba Maw.

After one of the most difficult campaigns of the war, Allied forces liberated most of Burma prior to the Japanese surrender on Aug. 14, 1945. Civil government was resumed in Oct., 1945, but the native nationalist feeling continued strong.

An agreement with Britain signed on Jan. 27, 1947, gave the Burmese an opportunity to determine their future form of government. The leftist Anti-Fascist People's Freedom League secured a majority in the Constituent Assembly elections held April 9, 1947, and the Assembly voted on June 17, 1947, to declare Burma a republic. Thakin Nu (now known as U Nu) became premier July 19, 1947, upon the assassination of U Aung San. Sovereignty was formally transferred on Jan. 4, 1948.

**GOVERNMENT.** The constitution adopted by the Constituent Assembly Sept. 24, 1947, provides for a government headed by the president, who is elected by the two houses of parliament—the Chamber of Deputies and the Chamber of Nationalities—meeting in joint session. The president appoints the premier on nomination of the Chamber of Deputies; the cabinet must enjoy the confidence of the Chamber of Deputies. Four frontier areas—the Shan, Kachin and Karen states, and the Chin special division—are constituent parts of the Union but enjoy some autonomy.

The Anti-Fascist People's Freedom League won about two-thirds of the 250 seats in the Chamber of Deputies in the



first elections held under the new constitution in 1951-52.

The constitution contemplates a form of state socialism, with the operation of all public utilities and the exploitation of all natural resources to come eventually under state control.

#### SOCIAL AND ECONOMIC CONDITIONS.

Burma had 4,937 state and recognized schools in 1947-48, with enrollment of 443,332. In addition, almost every hamlet has a Buddhist school where tuition is free. Because of the many monastic schools, the percentage of wholly illiterate men is small. There are universities at Rangoon and Mandalay, with a total of 3,350 students in 1950.

The natives in general are Mongolian; the Burmese are the most advanced.

Indians, settled in the delta region, supply most of the coolie labor, while the Chinese constitute the artisan and merchant class. Buddhism, the national religion, profoundly affects the national character; every village has its temple.

Burma is essentially agricultural, with crop growing concentrated in the delta and river valleys. It is a leading producer of rice, the staple food, which occupies two-thirds of the cultivated area. Output in 1953-54 was 7,200,000 short tons. Crops grown in the dry zone in upper Burma include millet, cotton, peanuts and sesame. Other crops include tobacco, fruit, vegetables and cereals. About 1½ million acres are under irrigation. The number of rubber plantations has increased. The principal domestic animals are water buffalo (721,000 in 1950), used as a beast of burden in the delta, and small humped oxen, which predominate in other areas. Cattle, including oxen, totaled 4,488,000 in 1950.

Leading industries include silk weaving and dyeing, rice husking, oil refining and wood carving.

Recent trade statistics are as follows (in millions of kyats):

	1950-51	1951-52	1952-53
Exports	980.8	1,093.2	1,241.0
Imports	681.2	818.7	885.5

Chief exports in 1952-53 were rice (73%), and timber, largely teakwood (3%). Leading customers were India (18%), Japan (16%) and the U.K. (10%); leading suppliers, India (27%), the U.K. (24%) and Japan (13%).

The 1953-54 budget, ordinary and capital, estimated revenue at 906,702,000 kyats and expenditure at 1,287,868,000 kyats. The kyat replaced the rupee as the monetary unit in 1952.

The principal commercial arteries are the Irrawaddy, navigable for 900 miles to Bhamo, and its tributaries. Regular

steamer service is maintained to Bhamo. Railways, designed to supplement river transport, totaled 1,777 miles in 1950, all state-owned. There are no rail connections with India or any other country. The length of roads was 12,472 miles in 1949. The Burma Road connects Lashio, a rail terminus in northern Burma, with Kunming, China.

#### NATURAL FEATURES AND RESOURCES;

CLIMATE. Slightly smaller than Texas, Burma is divided into three natural regions: the Arakan Yoma, a long, narrow mountain range forming the barrier between Burma and India; the Shan Plateau in the east, extending southward into Tenasserim; and the Central Basin running down to the flat, fertile delta of the Irrawaddy in the south. This delta contains a network of inter-communicating canals and nine principal mouths.

Mineral resources are considerable but, in many cases, undeveloped. Production by the Burmah Oil Company, Ltd., in 1939, was 7,396,000 barrels, but in 1953 it was only 895,000 barrels.

Other minerals include lead, silver, tin, zinc, nickel, cobalt, copper, gold, iron ore, molybdenum, coal, uranium (reported), rubies, sapphires and jade.

More than half of Burma is forested, with government reserves totaling 31,637 square miles. Teak, valuable for naval construction, is the main timber product. Its cutting is strictly controlled. Natural rubber exports were estimated at 6,000 metric tons in 1953.

Burma forms part of the Asiatic monsoon region, but its climate is modified by the topography. There are three seasons: (1) cool and rainless (November through February); (2) hot and rainless (March through May) and (3) rainy (June through October). At Rangoon the annual temperature range is only 10°; at Mandalay, about 20°. Annual rainfall at Rangoon is about 100 inches; at Mandalay, 33.4 inches.

## Chile (Republic) (República de Chile)

Area: 286,323 square miles.

Population (census April 1952): 5,930,809 (white, 30%; mestizo, 65%; Indian, 5%).

Density per square mile: 20.7.

President: Carlos Ibáñez del Campo.

Principal cities (census 1952): Santiago, 1,348,283 (capital); Valparaíso, 218,829 (port); Concepción, 119,887 (farming center); Viña del Mar, 85,281 (resort center); Antofagasta, 62,272 (nitrates).

Monetary unit: Peso.

Language: Spanish.

Religion: Roman Catholic.

HISTORY. Chile has had a relatively tranquil history amid South America's long

record of revolution and strife, but it has suffered repeated labor disturbances in recent years.

Europeans first arrived in 1536, when Diego de Almagro, an associate of Pizarro, led an unsuccessful invasion from Peru. Five years later another Spaniard, Pedro de Valdivia, founded Santiago. On Sept. 18, 1810, Chile rebelled against Spanish rule, but independence was not won completely until 1818, when Bernardo O'Higgins and José de San Martín finally crushed the Spanish armies.

Chile, which has never lost a war, fought with Bolivia and Peru in 1879-83 and won the province of Antofagasta, Bolivia's only outlet to the Pacific, as well as extensive areas from Peru. In World War I, Chile was neutral. The overthrow in 1931 of Colonel Carlos Ibáñez, who had seized power in 1927, was followed by a brief chaotic period in which seven presidents tumbled in and out of office, but Dr. Arturo Alessandri (1932-38) did much to restore Chile's political and economic order.

Pedro Aguirre Cerda, victor in the 1938 elections, initiated an extensive socialist program before his death on Nov. 25, 1941. Under both external and internal pressure, the latter notably from its strong Communist party, Chile finally broke relations with the Axis on Jan. 20, 1943, but did not declare war on Japan until Feb. 14, 1945.

Ríos died June 27, 1946. Following a special election, Gabriel González Videla, candidate of a leftist-center coalition, became president on Nov. 3, 1946. His administration was plagued by recurrent labor disputes, some of which were said to be Communist-inspired. He pursued a strong anti-Communist policy. Carlos Ibáñez was elected to succeed him Sept. 4, 1952.

**GOVERNMENT AND DEFENSE.** The nation elects a president every six years, a Senate of forty-five members every eight years (one half renewable every four years) and a Chamber of Deputies of 147 members every four years. The president is assisted by a cabinet responsible to him but subject to impeachment by Congress, which also may override a presidential veto by two-thirds vote. All literate citizens over twenty-one may vote in elections.

Military service is compulsory, beginning at twenty with an initial training period of nine months, after which a civilian is on reserve until the age of forty-five. In 1948 the army was unofficially estimated at 25,000. The navy, normally 12,000 men strong, had in 1953 one old battleship of 28,000 tons, two light cruisers (acquired from the U. S. in 1951), six destroyers, six frigates, seven submarines, two coast defense ships and other smaller craft. The air force was expanded during World War II.

**SOCIAL AND ECONOMIC CONDITIONS.** Education, free and compulsory between 7 and 15, is directed by the central government. In 1943, illiteracy was estimated at 24 per cent, third lowest in Latin America. School enrollment in 1949 was about 830,000. There are five universities, including the State University of Chile. Approximately 20 per cent of the budget is devoted to education.

The base of the white population is Spanish, although there are some German, English, Irish and Scotch. Roman Catholicism is the dominant religion, but church and state were separated in 1925.

Chilean agriculture is mostly confined to the temperate central valley, similar to that of California. The available productive land is extremely limited, and most of it must be irrigated. Wheat (1952-53; 1,199,000 metric tons) is the leading crop, followed by potatoes, oats, barley, corn, string beans and fruits. Grapes, next to wheat in acreage, produced 106,500,000 gallons of wine in 1953. Feudal-type estates, averaging 2,500 acres, predominate. Cattle in 1952 totaled 2,292,954 and sheep (1949) 6,345,000. The production of wool in 1951 was approximately 12,000 metric tons (clean basis).

**Foreign trade (in millions of U. S. dollars):**

	1951	1952	1953
Exports	371	456	411
Imports	329	371	336

In 1953 the leading customers were the U. S. (64%), Argentina (11%) and Germany (5%); leading suppliers were the U. S. (53%), Argentina (9%) and Germany (7%). Chief exports in 1952 were copper (56%) and nitrate (14%). Leading imports were machinery and vehicles, textiles, sugar, and iron and steel and manufactures.

Except for mineral processing, most manufacturing is of low-priced consumer's goods, particularly textiles. A steel industry was established in 1946; production for the year 1953 amounted to about 313,000 metric tons.

Highway mileage totaled approximately 31,250 in 1951, about a third improved. Rail mileage is 5,434, partly electrified. Civil aviation is highly developed in the interior, and several international lines serve the country. According to *Lloyd's Register*, the merchant marine had 94 vessels (100 tons and over), aggregating 199,293 gross tons, on June 30, 1953.

Recent financial data are as follows (in billions of pesos):

	1952	1953*	1954†
Revenue	36.1	43.6	62.9
Expenditure	42.0	54.1	62.9

\* Preliminary. † Budget estimate.



The total public debt on Dec. 31, 1950, was 7,526,100,000 pesos, of which 5,461,-100,000 pesos represented the internal debt, long and short term.

**NATURAL FEATURES AND RESOURCES;** **CLIMATE.** A narrow, mountainous land, Chile has one-third of its area covered by the towering ranges of the Andes. In the north is the mineral-rich Atacama Desert, between the coast mountains and the Andes. In the center is a 700-mile-long valley, thickly populated, between the Andes and the coastal plateau. In the south, the Andes border on the ocean.

At the southern tip of Chile's mainland is Punta Arenas, the southernmost city in the world, and beyond that lies the Strait of Magellan and Tierra del Fuego, an island divided between Chile and Argentina. The Juan Fernández Islands, in the South Pacific about 400 miles west of the mainland, and Easter Island, about 2,000 miles west, are Chilean possessions.

The basis of the country's economy is its mineral resources in the northern desert provinces of Atacama, Antofagasta and Tarapacá, where the only natural nitrate in the world is found. Some 60 per cent of the world's iodine is obtained as a by-product of nitrate processing. Chile's world monopoly in nitrate, however, declined in importance with development of the synthetic product.

The world's largest copper reserve, estimated at 134 billion pounds, is in Chile, and also more than 900 million tons of high grade iron ore. The reserve of Chilean coal, noted for quantity rather than quality, exceeds two billion tons.

Mineral production in 1953 was as follows: coal and lignite, 2,126,699 metric tons; copper, 337,242 tons; iron ore, 2,903,-435 tons; nitrate of soda, 1,420,243 tons; gold, 130,690 ounces; silver, 1,497,800 ounces. Mercury, manganese ore, cobalt, zinc, tungsten and molybdenum also are produced, and deposits of uranium have been reported. Oil was first produced in Tierra del Fuego in Dec. 1945. Production in 1953 was about 1,400,000 barrels.

Forests, estimated to cover 35 million acres in the southern provinces, yield a variety of commercial wood, including co-nifer, laurel and magnolia.

In Chile's extreme north the days are hot, the nights warm on the coast and cool in the interior. Central Chile's climate is comparable to that of southern California, and southward in the lake regions the climate is similar to that of the U. S. Pacific Northwest. In the extreme south, fogs and storms keep the mean temperature low. Santiago has extreme recorded temperature ranges of 25° and 96°. Rainfall there averages 14 inches annually.

## China (Republic) (Chung-Hua Min-Kuo)

Area: 3,858,900 square miles.\*  
Population (est. 1950): 475,000,000.\*  
Density per square mile: 123.1.  
President, Nationalist China: Generalissimo Chiang Kai-shek.

Premier: O. K. Yul.  
Chairman of People's Council: Mao Tse-tung.

Premier: Chou En-lai.  
Principal cities (est. 1952): Shanghai, 5,410,000 (chief port, industrial and financial center); Peking (Peiping), 2,240,000 (capital, Communist China); Tientsin, 2,010,000 (commercial center); Chungking, 2,000,000 (river port, trade center); Mukden, 1,790,000 (Manchurian industrial center); Canton, 1,210,000 (southern commercial center); Wuhan, 1,090,000 (river port); Nanking, 1,020,000 (former Nationalist capital).

Monetary unit: Chinese dollar.  
Language: Chinese.  
Religions: Confucianism, Buddhism, Taoism, Mohammedanism, Christianity.

\* Including Province of Formosa (Taiwan), Manchuria and Tibet; excluding Outer Mongolia.

**HISTORY.** By 2000 B.C., the Chinese were living in the Hwang Ho basin, and they had achieved an advanced stage of civilization by 1200 B.C. The great philosophers, Lao-tse, Confucius, Mo Ti and Mencius lived during the Chou dynasty (about 1122 to 249 B.C.). The warring feudal states were first united under Emperor Ch'in Shih Huang Ti, during whose reign (246-210 B.C.) work was begun on the Great Wall. Under the Han dynasty (206 B.C. to A.D. 220) China prospered and traded with the West.

The T'ang dynasty (618-907) has often been called the golden age of Chinese history. Painting, sculpture and poetry flourished under royal patronage, and printing made its earliest known appearance.

The Mings, last of the native rulers (1368-1644), overthrew the Mongol or Yuan dynasty (1280-1368) established by Kublai Khan, whose dominions extended into eastern Europe. The weakening Mings in turn were overthrown in 1644 by invaders from the north, the Manchus.

The Chinese closely restricted foreign activities, and by the end of the 18th century only Canton (and the Portuguese port of Macao) were open to European merchants. Following the Anglo-Chinese War of 1839-42, however, several treaty ports were opened and Hong Kong was ceded to Britain. Treaties signed after further hostilities (1856-60) weakened Chinese sovereignty and removed foreigners from Chinese jurisdiction. The disastrous Chinese-Japanese War of 1894-95 was followed by a scramble for Chinese leases and concessions by European powers which resulted in the nationalist Boxer Rebellion (1900), suppressed by an international force.



The death of the Empress Dowager Tzu Hsi in 1908 and the accession of the infant emperor Hsüan T'ung (Pu-Yi) were followed by a nation-wide rebellion led by Dr. Sun Yat-sen, who became first President of the Provisional Chinese Republic in 1911. The Manchus abdicated on Feb. 12, 1912. Dr. Sun resigned in favor of Yuan Shih-k'ai, who suppressed the republicans but was forced by a serious rising in 1915-16 to abandon his intention of declaring himself Emperor. Yuan's death in June, 1916, was followed by years of civil war between rival militarists and Dr. Sun's republicans. The death in 1925 of Dr. Sun, who had controlled only the Canton area in opposition to the recognized regime, was followed by a revival of the Kuomintang party, which practically deified him. Nationalist forces, led by Gen. Chiang Kai-shek and advised originally by Communist experts, soon occupied most of China, setting up a Kuomintang regime in 1928. Internal strife continued, however, and Chiang broke with the Communists.

An alleged explosion on the South Manchurian Railway on Sept. 18, 1931, brought invasion of Manchuria by Japanese forces, who installed the last Manchu emperor, Henry Pu-Yi, as nominal ruler of the puppet state of "Manchukuo." Japanese efforts to take China's northern provinces in July, 1937, were resisted by Chiang Kai-shek, who meanwhile had succeeded in uniting most of China behind him. Within two years, however, Japan seized most of the ports and railways. The Kuomintang government retreated first to Hankow and then to Chungking, while in "Occupied China" the Japanese set up a puppet government at Nanking headed by Wang Ching-wei. In 1943 Chiang became political as well as military leader of "Free China."

When the Japanese surrendered in 1945, a treaty was signed with the Soviet Union providing for Soviet withdrawal from Manchuria, joint Chinese-Soviet control of Manchurian railways for 30 years, a joint Chinese-Soviet naval base at Port Arthur and a free port at Dairen.

The surrender of Japan also touched off a civil war between Nationalist and Communist forces for control of China.

By the end of 1949 all China except the island of Formosa was under Communist control. Barricaded on Formosa, the Nationalist regime had little means at its disposal to make any effective counter-attack upon the mainland. The U. S., however, after the outbreak of the Korean war in June, 1950, promised naval and air aid to repel any invasion of Formosa.

The Communists meanwhile set up in September, 1949, a soviet-type government. After prolonged negotiations, the People's government and the Soviet Union signed a 30-year treaty of friendship and mutual

aid on Feb. 14, 1950; its published terms provided for a \$300,000,000 Soviet credit and for the return of the Changchun railroad to China and the eventual return of Port Arthur and Dairen.

The Communist regime subsequently was recognized as the legal government of China by many nations but was unsuccessful in its efforts to secure a place in the U. N. It threw several hundred thousand men into the Korean conflict in Oct. 1950, in a futile effort to drive U. N. forces from Korea. With the signing of an armistice on July 27, 1953, and the completion of the exchange of prisoners of war, world attention shifted to the aid being given by Communist China to guerrilla forces in Indo-China.

**GOVERNMENT AND DEFENSE.** Under the Nationalist constitution of 1947, the highest state organ is the National Assembly, which meets once each three years and is the "sovereign organ of the people." Its members are elected for 6-year terms on the basis of territorial and professional representation. The Assembly elects the President and Vice President of the Republic for 6-year terms. The organs of government include the Executive Yüan (cabinet), whose members, headed by the Premier, are appointed by the President with the concurrence of the Legislative Yüan and the Legislative Yüan, which exercises legislative functions when the Assembly is not in session and has ultimate control over the cabinet.

The constitution of the People's republic was approved by a political consultative conference on Sept. 27, 1949, and was proclaimed on Oct. 1. It established as the highest organ of the state the people's government council, which is headed by a chairman and has legislative functions. The government council established as the highest executive organ a state administrative council (cabinet) headed by the premier. Effective control is exercised throughout by the central committee of the Chinese Communist party.

**Defense.** Military service is compulsory in Nationalist China; the initial training period is one or two years. The fighting strength of the army in 1953 was upwards of 600,000 men. The air force had about 200 planes and the navy, some 100 small vessels.

Supreme control of the Communist armed forces is vested in the people's revolutionary military council. Communist forces in 1953 were estimated to number from 4,000,000 to 5,000,000 men, divided into four field armies. The air force had about 1,800 Soviet-built planes, about half of them jet fighters. About 50 naval vessels, including 20 submarines, were reported to have been acquired from the U.S.S.R.

**SOCIAL AND ECONOMIC CONDITIONS.**

*Education.* Emphasis on the mainland is upon technical training and inculcation of the Communist ideology. In 1952, there were reported to be about 550,000 primary schools with about 53,000,000 pupils, 5,500 secondary schools with about 3,000,000 pupils and, in June 1953, 218 colleges and universities with 219,700 students.

The mass literacy movement has been accompanied by the replacement of the old classical or "dead" Chinese language with the popular vernacular (Pai-hua) of the Mandarin dialect, employing perhaps 1,000 of the most essential of the many thousands of Chinese ideographs.

*Agriculture.* In China, nearly 80 per cent of the population depend on the land for livelihood. Subsistence crops are necessarily emphasized, but China is still not self-sufficient in food. Cultivation is intensive, holdings are small, and irrigation is widely practiced. The three most important food crops are rice, wheat and maize; total grain production was officially estimated at 163,750,000 metric tons in 1952.

In northern China, wheat, barley, corn, sorghum, millet and other cereals, and beans and peas predominate, whereas in the south, rice, sugar and indigo are most important. The Yangtze basin, one of the most favored agricultural regions in the world, is China's premier granary. Tea, the chief beverage, is grown mainly in the central uplands, coastal ranges and Szechwan; production in 1952 was officially placed at 82,500 tons.

Silkworm culture is practiced widely, especially in the lower Yangtze valley. Cotton, the major purely industrial crop, runs from 2,500,000 to 4,000,000 bales a year. Soybeans are of ever-increasing importance. Other crops include fibers, tobacco, vegetable oils, cane sugar and many medicinal plants and spices.

The urgent need for subsistence crops has confined grazing grounds for sheep and cattle to the dry northwest and to mountain pastures. However, such animals as goats, poultry and especially pigs are raised everywhere.

*Industry.* Industrially, China is still in its infancy. Development has been mainly in the erection of textile mills, silk and flour mills, match factories, tanneries and a few steel and cement mills. The production of consumer's goods far exceeds that of producer's goods, which must still be imported. Much of the industry which had been developed in the lower Yangtze valley and the Shanghai area was moved westward in 1938 and 1939 to escape Japanese capture, and southward in 1948 to escape Communist control.

The Communist regime is reported to be concentrating upon Manchuria as China's

industrial center and to be shifting some industries to the northwest. A five-year plan of industrial development beginning in 1953 was announced in Dec. 1952.

*Trade.* According to official reports, the U.S.S.R. and its satellites accounted for 72 per cent of Communist China's total trade in 1952. In 1948, the U. S. supplied 48 per cent of China's recorded commercial imports; 31 per cent of the exports went to Hong Kong and 20 per cent to the U. S. Textiles and products accounted for 45 per cent of the domestic exports; tung oil, 9 per cent; pig bristles, 7 per cent; and eggs and tungsten ore, each 3 per cent.

*Communications.* Exploitation of many of China's natural resources has been handicapped by the lack of internal communications. There is an extensive system of inland waterways and canals, however, and in central and south China most of the freight is carried by water.

The modern highway system now totals about 100,000 miles, but at least half of the system is in need of extensive repairs. The railway system of about 14,000 miles, concentrated in the lower Yangtze basin and in north China and Manchuria, has been rehabilitated and is being extended by the Communists. The main port is Shanghai.

*Finance.* The 1953 Communist budget balanced revenue and expenditure at 233,-499,100,000,000 People's yuan (U. S. \$9,864,-700,000). The Nationalist government on Formosa continued to depend on U. S. aid to balance its budget.

**NATURAL FEATURES AND RESOURCES;**  
**CLIMATE.** China has about 1¼ times the area of the continental United States. Its coast line is roughly a semi-circle, about 2,150 miles long. The greater part of the country is mountainous, and only in the lower reaches of the Hwang Ho and Yangtze Kiang are there extensive low plains. The principal mountain ranges are the Tien Shan, to the northwest; the Kunlun chain, which attains a maximum height of 23,890 feet, running south of the Takla Makan and Gobi deserts; and the Trans-Himalaya, connecting the Kunlun with the borders of China and Tibet. Manchuria is largely an undulating plain connected with the north China plain by a narrow lowland corridor. Inner Mongolia contains the relatively fertile southern and eastern portions of the Gobi. The large island of Hainan (13,500 sq. mi.) lies off the southern coast.

Hydrographically, China proper consists of three great river systems. The northern part of the country is drained by the Hwang Ho (Yellow), 2,700 miles long and mostly unnavigable. The central part is drained by the Yangtze Kiang, the fifth longest river in the world (3,100 mi.). The Si Kiang in the south is about 1,650 miles



long and navigable for a considerable distance. In addition, the Amur forms part of the northeastern boundary.

**Minerals.** Mineral resources are considerable. Iron ore, far less plentiful than coal, is mined principally in the lower Yangtze valley and in north China. Tin, mined in Yunnan and southwest Szechwan, has been a major mineral export. Of some rarer minerals, notably antimony and tungsten, China is sometimes the world's leading producer. Lead, zinc, silver, mercury and gold are also mined, and discovery of uranium has been reported. Mineral production in 1952 was estimated as follows: coal, 51,000,000 metric tons; iron ore, 4,000,000 tons; tin (in ore), 8,500 tons; tungsten concentrates, 20,000 tons.

**Forest and Fisheries.** China urgently needs reforestation. Most remaining forests are on inaccessible mountain slopes. Bamboo is cultivated in groves throughout the country south of the Tsinling mountains. Both sea and river fisheries are rich and varied, and fresh or salted fish is a staple food in many districts. Coastal fisheries are at Shantung, Chekiang and Kwantung. **Climate.** There are great diversities of climate. North China has the coldest winters in the world for its latitude (23.5° average in January at Peiping). The Yangtze valley is warmer, with winter temperatures more like those of Britain, while the south has warm subtropical winters. Summer temperatures are uniformly hot throughout China (about 79° in July at Peiping and 82° at Hong Kong). South China receives regular rainfall averaging from 40 to 60 inches annually, but in the north rainfall is irregular and not as heavy; droughts and floods are common.

**FORMOSA (TAIWAN)**—Status: Province (Part of Republic of Nationalist China).

Area: 13,836 square miles.

Population (census Dec. 1951, excluding troops and militia): 7,830,748.

Capital: Taipei (Taihoku), 540,971.

Foreign trade (1952): exports, U. S. \$88,000,000; imports, \$105,000,000. Chief exports: sugar (58%), rice (20%), tea.

Agricultural products (est. 1952-53, in metric tons: raw sugar, 752,000; rice (paddy), 2,100,000; tea, bananas, pineapples, sweet potatoes.

Industries: sugar refining, canning, cement, chemicals, wood, paper.

Minerals: gold, coal, petroleum, silver, sulfur.

Formosa is a large island in the western Pacific, separated from China to the west by the Taiwan straits (narrowest point, 90 mi.). The Pescadores (Bokoto) (about 77 sq. mi.) and other outlying islands became administratively a part of Formosa under Japanese rule. Formosa, ceded to Japan in 1895 after the Chinese-Japanese War, remained Japanese until it was restored to China in 1945, in accordance with

the Cairo declaration. It was the only territory under the control of the Nationalist regime after 1949.

Most of the inhabitants are of Chinese stock. There are also about 140,000 aboriginal tribesmen in the mountainous interior. Sugar cane, grown under the plantation system, is the most prosperous of the island's developments.

Formosa is one of the world's chief sources of camphor, and government monopolies of camphor, salt, opium and tobacco have been established. Forest resources are enormous. Railway mileage totaled (1951) about 3,050 and roads 16,380.

The climate is tropical, with temperatures above 60° (except in mountain areas) every month except January.

**SINKIANG (CHINESE TURKESTAN)**—Status: Chinese province under joint Chinese-Soviet economic control.

Area: 705,969 square miles.

Population (est. 1950): 3,730,000.

Capital: Tihwa (Urumchi) (20,000).

Chief exports: wool, cotton, furs, skins, sheep, cattle, horses.

Agricultural products: wheat, corn, rice, cotton, sorghum, beans, fruit.

Minerals: jade, gold.

Largest and most remote of China's provinces, Sinkiang experienced violent Mohammedan uprisings after 1932. The Chinese governor, Gen. Shen Shih-tsai, re-established order in 1937 with Soviet support. In 1943, Russian troops withdrew, taking with them all their economic installations, but following World War II Soviet influence was gradually restored and the province surrendered to the Chinese Communists in late 1949. On Mar. 27, 1950, the People's government signed an agreement with the U.S.S.R. providing for joint exploitation of Sinkiang's natural resources.

Chinese constitute about 5 per cent of the population; there are 14 other ethnic groups, mostly Turki tribes of the Sunni Moslem faith. The Mongol tribes are Lama Buddhists. There are vast stretches of desert and arid land, and the limited area under cultivation is mostly in oases and river valleys.

Almost all of the limited foreign trade is conducted with Russia. About 85 per cent of the population lives in the western side of the province, adjacent to the Soviet Union and separated from China by desert.

**TIBET**—Status: Nominally independent; under Chinese Communist control.

Area: 469,294 square miles.

Population (est. 1948): 3,000,000.

Capital: Lhasa (50,000).

Ruler: The 14th Dalai Lama (Lingerh Pamo Töntrup).

Monetary unit: Sang.

Exports: wool, live animals, salt, hides, borax, tea, musk.



**Agricultural products:** barley, fruits, pulse, vegetables.

**Minerals:** borax, salt, coal, gold.

Tibet, north and northeast of the Himalayas, is the highest country in the world, averaging 16,000 feet in elevation and having many peaks ranging up to more than 25,000 feet. Chinese suzerainty over Tibet was established in the 18th century. The area was invaded by a British expeditionary force in 1904, but the Anglo-Russian Convention of 1907 recognized China's influence and stipulated that neither Russia nor Britain should interfere in Tibet's affairs.

Chinese Communist troops invaded the area in October, 1950. An agreement signed with Communist China in May, 1951, recognized the Dalai Lama as spiritual and temporal ruler but made Tibet virtually a Chinese province.

The religion and predominant factor in Tibet's social system is Lamalism, a late form of Buddhism modified by animism and primitive magic. Education is in the control of the many monasteries, some of which have more than 1,000 monks. A large number of the population are lamas, mostly celibates. Both polyandry and polygyny are practiced.

The climate is extremely variable. Total yearly precipitation in most of the country is only about 8 inches.

**KWANTUNG**—Status: Chinese territory under Soviet occupation.

Area: 1,444 square miles.

Population (est. 1938): 1,750,000.

Kwantung, at the southern end of Manchuria's Liaotung peninsula, was leased to Russia by China in 1898. The lease was transferred in 1905 to Japan, which administered the territory until the end of World War II. The Chinese-Soviet treaty of 1945 provided for the return of the territory to China and for joint control of the naval base of Port Arthur; Dalren was to be a free port. The Soviet Union, however, refused to honor these provisions and retained sole control of the area.

Port Arthur has an excellent ice-free, deep-water harbor which gives it great strategic importance. Dalren, the principal city (pop. 533,696), also has an ice-free harbor. Both Dalren and Port Arthur are connected with the Manchuria railways.

## Colombia (Republic) (República de Colombia)

Area: 439,714 square miles.

Population (est. 1953): 12,033,000 (mestizo 68%; white, 20%; Indian, 7%; Negro, 5%).

Density per square mile: 27.4.

President: Lt. Gen. Gustavo Rojas Pinilla (provisional).

Principal cities (census 1951)\*: Bogotá, 643,187 (capital); Medellín, 329,965 (min-

ing); Barranquilla, 278,269 (seaport); Cali, 244,463 (coffee, mining); Cartagena, 110,504 (seaport); Bucaramanga, 104,179 (industrial center).

Monetary unit: Peso.

Language: Spanish.

Religion: Roman Catholic.

\* Preliminary figures.

**HISTORY.** Colombia, nearly nine times the size of New York state, is the only country in South America with frontage on both the Pacific and the Caribbean. Its northern coast was one of the first parts of the Americas to be visited by Spanish explorers. Darien, the first permanent European settlement on the American mainland, was founded in 1510, Santa Marta in 1525, and Bogotá in 1538.

New Granada, as Colombia was called until 1861, was comparatively neglected during the Spanish colonial era. After winning independence from Spain during a fourteen-year struggle ending in 1824, the country established a republic in 1831, including the area that now is Panamá. Intermittent civil war plagued Colombia until 1903, when Panamá, with United States backing, seceded from the republic.

The century-old boundary dispute with Peru over Leticia almost led to war in 1931, but a settlement was arranged through the League of Nations in 1934-35.

Bogotá, host at the time to the Ninth International Conference of American States, was swept by a destructive but unsuccessful revolt on April 9, 1948, following the assassination of Jorge Eliécer Gaitán, extremist Liberal leader. The 1949 presidential election, held on Nov. 27 and boycotted by the Liberals, was won by the Conservative candidate, Laureano Gómez, who took office on Aug. 7, 1950. Gómez returned to office on June 13, 1953, after being on leave of absence since Oct. 1951, but was immediately ousted in a *coup d'état* led by Lt. Gen. Gustavo Rojas Pinilla, who became provisional president.

**GOVERNMENT AND DEFENSE.** Colombia's president, who appoints his own cabinet, is elected every four years and is not eligible to succeed himself immediately. The Senate—upper house of Congress—has 63 members elected for four years by direct vote. The House of Representatives of 123 members is directly elected for two years. All male citizens over 21 may vote.

A term of military service is compulsory for men between twenty-one and thirty. The strength of the peacetime army averages about 13,000-14,000. With 2,500 personnel, the navy has two modern destroyers, one sea-going gunboat, three patrol craft, two frigates, six river gunboats and several launches. An infantry battalion and a frigate served in Korea.

**SOCIAL AND ECONOMIC CONDITIONS.** Primary education is free and technically

compulsory. Illiteracy (7 years and over) was officially placed at 37% in 1951. By law, 10 per cent of the national budget goes for education. In 1951, 14,957 primary schools reported enrollment of 931,814 pupils, 650 high schools 78,124 and 187 commercial schools 32,405. In addition to the national University, founded at Bogotá, 1572, there are four departmental universities and several private ones.

Because of the former isolation of the interior, the language and manners in Bogotá are more purely Castilian than anywhere else in South America. The white race retains its social and economic dominance over Indians and Negroes, but race mixture is steadily reducing its numbers. In recent years, notably since adoption of a new labor code in 1944, the working classes have made important gains, including minimum wages, vacations and holidays, accident and sickness benefits, and the protected right of union organization.

Most of the people live by farming and cattle herding, but only a small part of the land is cultivated, and that by primitive means. Colombia's coffee, the nation's principal crop, is a mild variety that does not compete with Brazilian types. Exports in 1953 totaled 6,632,000 bags of 132 pounds each. Other crops include bananas, coconuts, tobacco, sugar cane, corn, cotton, cacao, beans, rice, tropical fruits and, in the temperate regions on plateaus and in mountain valleys, cereals and potatoes. Cattle were estimated at 15,512,000 in Dec. 1950, according to U. N. statistics.

The leading manufacturing industries are foodstuff processing, textiles and beverages. In 1953 there were 11,138 industrial establishments with 182,387 workers and annual gross production estimated at 2,552,318,000 pesos.

To protect foreign trade balances, the government has taken over control of exports and imports. Trade statistics, in millions of pesos, are as follows:

	1951	1952	1953
Exports	1,093.4	1,183.1	1,490.3
Imports	988.8	1,038.4	1,192.1

Leading exports in 1953 were coffee (83%), petroleum (13%) and bananas (2%). Leading customers were the U.S. (80%), Netherlands Antilles (petroleum for refining) (6%) and western Germany (5%); leading suppliers, the U. S. (63%), western Germany (7%) and Britain (5%).

Difficult terrain makes Colombia's rail and road building costly. Rail mileage was put at 1,782 (main-line track) in 1951; and improved highway mileage at 12,600. Air transit is well advanced, and there are 4,620 miles of navigable waterways.

Colombia's 1954 budget provided for expenditures of 997,400,000 pesos. The pub-

lic debt on Dec. 31, 1951, amounted to 567,055,667 pesos.

**NATURAL FEATURES AND RESOURCES; CLIMATE.** Through the western half of the country, three Andean ranges run north and south, merging into one at the Equadorean border. The eastern half is a low, jungle-covered plain, drained by spurs of the Amazon and Orinoco, inhabited mostly by uncivilized Indians. The fertile plateau and valley of the eastern range is the most densely populated part of the country.

Rich in minerals, Colombia has the third largest oil industry in Latin America (70 per cent controlled by U. S. interests). Production in 1953 was 39,430,787 barrels. The country is also rich in platinum and has world-famous emerald mines at Muzo in the eastern Andes. Mineral production includes gold (1953: 437,295 troy ounces), silver (117,383 ounces) and crude platinum (exports 1953: 29,901 ounces).

Colombian forests, covering a large part of the country from the western Andes to the eastern plain, are a great but little exploited source of wealth. Products include vanilla, quinine, ipecac, sarsaparilla, gums and balsams, tanning agents, dyewoods, hardwoods and rubber.

Alligators along many of the large rivers are hunted for hides. The rivers and lakes abound with fish and turtles, a source of commercial tortoise shell.

Although Colombia lies almost entirely in the north torrid zone, its climate is tempered by prevailing winds and high altitudes in the western, mountainous area. High temperatures and excessive moisture prevail in the lower areas, along the coast and in the larger river valleys. At Bogotá, the mean temperature stays in the 50's every month of the year; annual rainfall there is 42 inches.

## Costa Rica (Republic)

(República de Costa Rica)

**Area:** approximately 19,238 square miles. **Population** (est. Dec. 31, 1953): 893,000 (white and mestizo, 97%; Negro, 2%; Indian, 1%).

**Density per square mile:** 46.4.

**President:** José Figueres Ferrer.

**Principal city** (census 1950): San José, 86,909 (capital and only large city).

**Monetary unit:** Colón.

**Language:** Spanish.

**Religion:** Roman Catholic (state).

**HISTORY AND GOVERNMENT.** Costa Rica was discovered and probably named by Columbus in 1502. A Spanish province as early as 1530, it proclaimed its independence in 1821, and was a member of the Central American Union from 1823-38.



Aside from boundary disputes with Panamá and Nicaragua, Costa Rica's modern history was comparatively tranquil until the spring of 1948, when a brief civil war followed congressional annulment of presidential elections in which Otilio Ulate Blanco defeated the Government candidate. Leftist-supported government forces surrendered on April 20, and on May 8 an 11-man junta took over and a Constituent Assembly was elected on Dec. 8, 1948. The Assembly met on Jan. 16, 1949, confirmed Ulate as president-elect, and, after drafting a new constitution, dissolved on Nov. 8, on which date Ulate took office. José Figueres Ferrer was elected to succeed him in the July 1953 elections.

Under the 1949 constitution the president and one-house Congress of 45 members are popularly elected for terms of four years.

The army was abolished in 1950. There is a police force of 1,000 and 700 coast guardsmen.

**SOCIAL AND ECONOMIC CONDITIONS.** Costa Rica's illiteracy rate of approximately 15 per cent is the lowest in Central America, with elementary education free and compulsory. In 1951 there were 1,139 primary schools (116,157 pupils) and, in 1950, 24 secondary schools and 7 technical schools. The National University is at San José. The English language has been taught in all of the primary schools since 1944.

Coffee, bananas, abacá fiber and cacao are the basic products of Costa Rican agriculture, which is characterized by the prevalence of small land holdings. Cotton, sugar cane, tobacco, corn, beans, rice and potatoes are subsidiary crops. Cattle are raised mainly for dairying.

Coffee production totaled 551,300 bags of 132 lb. each in 1952-53.

Manufacturing is virtually limited to locally-consumed products. Chief among those products are furniture, fine woodwork and tobacco.

Foreign trade data (in millions of U. S. dollars) are as follows:

	1951	1952	1953
Exports	63.41*	73.37*	76.24
Imports	55.73	67.87	73.67

\* Banana valuation adjusted.

In 1953 leading customers were the U. S. (65%), Germany (10%) and Canada (9%); leading suppliers, the U. S. (59%), Germany (8%) and Britain (8%). Leading exports were coffee (44%), bananas (42%) and abacá (2%); imports included textiles, machinery, vehicles and petroleum products.

In 1952 the rail system totaled approximately 660 miles; improved highways, 950 miles.

**NATURAL FEATURES AND RESOURCES; CLIMATE.** Most of Costa Rica is elevated tableland, from 3,000 to 6,000 feet above sea level, with sharp slopes to the Caribbean and Pacific. Cocos Island, about 300 miles off the Pacific Coast, is under Costa Rican sovereignty; although it is mostly tropical jungle, it is of potential strategic importance in the defenses of the Panama Canal.

Gold is the most valuable mineral, although silver, manganese, mercury and sulfur also exist. Oil indications have been found in the south.

The mountain slopes yield such forest products as balsa, cedar, dyewood, mahogany and rosewood.

The weather is cool and refreshing in the Costa Rican highlands, with average temperatures of 68°, and San José is increasing in importance as a tourist resort. Along the coasts, the mean annual temperature is about 82°. The rainy season is usually from April or May to about December; rainfall amounts to 70 inches yearly on the Pacific coast and more than 130 on the Atlantic or Caribbean.

## Cuba (Republic) (República de Cuba)

Area: 44,217 square miles.

Population (census March 1953)\*: 5,814,112 (white and mulatto, 75%; Negro, 24%; Mongoloid, 1%).

Density per square mile: 131.5.\*

President: Fulgencio Batista y Zaldívar (provisional).

Principal cities (census 1953)\*: Havana, 783,162 (capital, industrial center); Holguín, 226,644 (trading center); Camagüey, 204,254 (cattle, sugar); Santiago de Cuba, 166,565 (seaport, mining); Santa Clara, 144,630 (sugar, mining); Cienfuegos, 99,000 (sugar port).

Monetary unit: Peso.

Language: Spanish.

Religion: Roman Catholic.

\* Preliminary figures.

**HISTORY.** The history of Cuba, largest of the many Caribbean islands, began for white men with discovery by Columbus on his first voyage in 1492. It was a Spanish colony until 1898, except for brief British occupancy in 1762-63. Open war raged between Cuban rebels and Spanish troops from 1867 to 1878. Fighting broke out again in 1895, and when the United States threatened to intervene, Spain felt its national dignity had been wounded. Strained relations between Spain and the U. S. led to war when the U. S. battleship *Maine* was blown up in Havana harbor in Feb., 1898. At the end of the brief Spanish-American War, Spain gave up Cuba.



Until creation of the Cuban republic in 1902, the island was ruled by United States military authorities. For the first thirty-two years of the republic's life, the United States held the right to intervene in any crisis—a right which was invoked during insurrections which occurred in 1906, 1912 and 1917.

Corruption bedeviled Cuba after World War I, particularly during the eight-year presidency of Gerardo Machado, who was ousted in a 1933 revolution. Five different presidents tried to rule in the next few months; out of this political whirligig came the dictatorship of Fulgencio Batista, who climbed almost overnight from army sergeant to army commander-in-chief. In 1940 Batista legalized his reign by being elected to a four-year presidential term. He was succeeded in 1944 by Dr. Ramón Grau San Martín. Carlos Prío Socarrás won the June 1948 elections and took office Oct. 10 for a 4-year term. Prío was ousted March 10, 1952, however, by Batista, the former dictator, who became provisional president on April 4.

**GOVERNMENT.** Cuba's president is elected for a 4-year term by direct popular vote, in which women take part. The Cabinet, though named by the president, is responsible to the Congress—a 54-member Senate and a 136-member House, both elected for four years. Much Cuban lawmaking is done through presidential decree, reviewable by the Supreme Court. Cuban politics are dominated by personalities, with the result that there are frequent shifts in political grouping.

Compulsory military service was established in 1942. The army numbers about 15,000; the navy, 5,000, manning some twenty small coastal craft. The air force has 50 combat planes. Two U. S. air bases and one naval base built in World War II at a cost of more than \$30,000,000 were turned over to Cuba in 1946. However, the United States retained its long-held naval base at Guantánamo.

**SOCIAL AND ECONOMIC CONDITIONS.** Education is free and compulsory from 7 to 14. In 1950 there were 7,598 public primary schools with 546,984 pupils. Literacy was estimated at close to 70 per cent. The University of Havana, founded in 1721, has about 15,000 students.

Half of the employed are engaged in agriculture, which normally accounts for more than 90 per cent of the exports. Often jolted by fluctuations in the price of sugar, of which it produced 5,686,966 short tons in 1953. Cuba is now seeking to vary its agricultural production. About two-thirds of the cultivated area is devoted to sugar cane. Other important crops are tobacco (1952-53 output: 39,500

short tons), coffee, cacao, fruits, vegetables, henequen, corn, pineapples and rice. The livestock and dairy industry has progressed greatly.

Manufactured products include sugar, molasses, syrup, brandy, rum, alcohol, cigars, cigarettes, cigar boxes, sponges, cement, cordage, salt, dressed hides, dairy products and canned goods. The leading industry is the processing of sugar cane and its products.

Foreign trade is as follows (in millions of pesos):

	1951	1952	1953*
Exports	786	677	654
Imports	640	618	490

\* Provisional.

Leading customers in 1952 were the U. S. (61%), Britain (8%) and Japan (6%). The U. S. was by far the leading supplier (75%). Leading exports were sugar and molasses (85%) and tobacco (6%).

Mainline railroads totaled 3,017 miles in 1949, plus 7,870 miles of industrial trackage, mostly on sugar estates. Improved highways totaled 2,320 miles. Domestic airlines are operated by the Cuban National Aviation Company, a Pan American subsidiary.

The budget for the fiscal year 1953-54 balanced revenue and expenditure at \$298,000,000. As of Dec. 31, 1951, the funded public debt was \$217,700,000.

**NATURAL FEATURES AND RESOURCES; CLIMATE.** Long, narrow Cuba has maximum dimensions of 730 by 160 miles, and is approximately the same size as Pennsylvania. It has mountainous areas in the southeast, central area and west, but the rest is flat or rolling. The coastline, measuring more than 2,100 miles, is indented by many large bays. Cuba's numerous short rivers are of slight importance commercially.

Rich mineral beds, mostly in the eastern province of Oriente, include iron, copper, manganese, chromium and nickel. Iron ore reserves, estimated at 3,500,000,000 tons, are 90 per cent held by U. S. steel interests. Virtually all mineral exports go to the United States.

Cuba has an estimated 3,500,000 acres of wooded land, with valuable cabinet woods, such as cedar and mahogany, as well as fibers, resins and oils.

The tempering influence of the trade winds on the island's tropical climate makes Havana's average temperature 77° with a range of only 10° (71° to 81°). The dry season lasts from November to April, and the warmer wet season occurs thereafter. Mean annual rainfall at Havana is about 50 inches.

## Czechoslovakia (Republic)

(Československa Republika)

Area: 49,330 square miles (excluding Ruthenia).

Population (census 1950): 12,339,674 (1949: Czech, 67.0%; Slovak, 23.7% German, 3.2%; Magyar, 3.2%; Polish, Jewish and others, 2.9%).

Density per square mile: 250.1.

President: Antonín Zápotocký.

Premier: Viliam Široký.

Principal cities (est. 1948): Prague (Praha), 932,024 (capital, industrial center); Brunn (Brno), 277,196 (textiles); Ostrava (Moravská Ostrava), 183,794 (iron and steel products); (1947): Bratislava, 172,664 (Danube port); Pilsen (Plzeň), 118,152 (Škoda steel works).

Monetary unit: Koruna.

Religions (est. 1947): Roman Catholic, 77%; Czechoslovak Church, 8%; Protestant, 7%; Greek Orthodox, .5%; Jewish, .5%; others and no confession, 7%.

**HISTORY.** Few nations have had a more tragic history than Czechoslovakia, which twice won and lost its independence within 30 years. Born out of World War I, the young republic was an early victim of Nazi aggression in 1938-39. At its rebirth in 1945 following World War II, it enjoyed a measure of its traditional democracy under the shadow of Soviet control. During the next three years Czechoslovakia made by far the greatest economic progress of all the Soviet satellites, but the government was subjected to increasing Communist pressure, climaxed in the spring of 1948 by the Communists' seizure of control and the resignation of President Beneš.

It was probably about the 5th century, A.D., that the ancestors of the Czechs and Slovaks settled in the region of modern Czechoslovakia. Slovakia passed under Magyar domination, but the Czechs founded the kingdom of Bohemia, which was among the most powerful in Europe for centuries. German encroachment began in the 12th century and was furthered by the election in 1526 of a Hapsburg as Bohemian king. After the Czechs rebelled in 1618 and were defeated at the Battle of White Mountain in 1620, they were ruled for the next 300 years by the Hapsburgs as part of the Austro-Hungarian Empire. In World War I, Czech patriots, notably Thomas G. Masaryk, went abroad to promote support for Czech independence, while Czech legions fought against the Central Powers. On Oct. 28, 1918, Czechoslovakia proclaimed itself a republic; shortly thereafter Masaryk was unanimously elected first president.

Between World Wars I and II, Czechoslovakia supported the League of Nations, formed the Little Entente with Yugoslavia and Rumania, and co-operated closely with France. President Masaryk resigned in 1935, two years before his death at the

age of eighty-seven, and was succeeded by Dr. Eduard Beneš.

Meanwhile, the German plan of aggression was under way. Czechoslovakia's German minority, led by Konrad Henlein, began demanding autonomy. The government granted many concessions which, of course, were not enough to suit the Germans. The beginning of the end came at the Munich conference on Sept. 30, 1938, when France and Britain agreed that the Nazis could take the Czech Sudetenland on the German border. Dr. Beneš resigned on October 5, and Czechoslovakia became a federal union in the German orbit. The Poles, in the meantime, had seized Czechoslovakia's Teschen area, and Hungary had taken areas in Slovakia and Ruthenia. In March, 1939, the Nazis set up Slovakia as a puppet state, declared Bohemia and Moravia to be Nazi protectorates, and gave Hungary the remainder of Ruthenia. Both Slovakia and Bohemia-Moravia were occupied by German troops.

Dr. Beneš organized a government-in-exile in London in 1940, with Jan Šrámek as Premier and himself as President. Soon after the government returned to Czechoslovakia in April, 1945, Ruthenia, the easternmost province, was ceded to Russia. On July 3, 1946, Communist Klement Gottwald formed a six-party coalition cabinet. Amid increasing pressure from Moscow, Gottwald's cabinet remained in office until the bloodless *coup d'état* of Feb. 23-25, 1948, when the Communists seized complete control. President Beneš stayed on until June 7, when he resigned following parliamentary elections in which the Communists and their allies were unopposed. Parliament elected Gottwald to the presidency, and Communist Antonín Zápotocký succeeded to the premiership. Beneš died Sept. 3, 1948. On the death of Gottwald Mar. 14, 1953, Zápotocký became president and Viliam Široký was named Premier.

**GOVERNMENT AND DEFENSE.** Czechoslovakia's Soviet-type constitution, promulgated on June 8, 1948, makes the 300-member unicameral Parliament the supreme organ of the state with control over courts and civil service. The government is headed by the president, elected by Parliament for a seven-year term, and the prime minister and his cabinet who are appointed by the president but are responsible to Parliament. The constitution contains nominal guarantees of civil liberties and provides that the state shall conduct all economic activity in the public interest on the basis of a single economic plan. Provision is made for limited Slovak autonomy under an elected council of 100 members.

The army, based on a cadre of Czech units which fought with the Red Army



during World War II, has been trained and equipped by the Soviet Union with organization and armament on its pattern. Estimated strength is 300,000, including police.

**SOCIAL AND ECONOMIC CONDITIONS.** Illiteracy is low in Bohemia, higher in Slovakia, and probably less than 2% for the whole country. In 1953 there were 9,045 elementary schools with 1,030,000 pupils, 2,745 higher grade schools with 473,000 and 304 secondary schools with 80,300. Vocational pupils numbered 113,000. The 17 institutions of higher learning had 42,000 students.

One of the country's greatest problems is the ethnic variety of its population. In view of the traitorous role played by German and Hungarian minorities in the disintegration of Czechoslovakia in 1938-39, the government decided to expel them from the country. Many Hungarians, however, were permitted to remain.

Decrees of the government issued on Oct. 24, 1945, ordered the nationalization of almost all industrial corporations with more than 500 employees. All national resources, public utilities, transport, commercial banks and insurance companies became state property. Other laws enacted April 28, 1948, nationalized all enterprises employing more than 50 as well as concerns of any size operating in key industries.

Distribution of large estates had already been accomplished following World War I by the 1919 Land Reform Law.

Approximately 41 per cent of the total area is arable, 31 per cent forest, and 15 per cent meadows and pastures. Sugar beets (1949: 4,466,000 metric tons), wheat (1950: 1,590,000 tons), corn and high-grade barley and hops for beer brewing are cultivated in the low-lying areas. In more elevated regions, the cultivation of potatoes (1950: 7,484,000 tons), rye (1,250,000 tons) and oats predominates. Higher lands are also used for growing fodder crops or for grazing. In 1951 there were 4,100,000 cattle and 3,700,000 hogs and, in 1950, 480,000 sheep and 640,000 horses.

The highly developed position of Czech industry is important in foreign trade, since output far exceeds domestic needs. Abundance of coal and presence of iron ore give the country a big metallurgical industry. Steel production was unofficially estimated at 3,667,000 metric tons in 1952. The Skoda steel works at Pilsen are one of the largest in Europe.

Other industries are glass, porcelain and pottery making, while large forest areas provide raw material for the timber, paper and cellulose industries. Also highly developed are the textile industries, including cotton, wool, flax and jute production, and

the shoe industry. The famous Bat'a shoe factories are at Zlín.

Foreign trade is now a state monopoly managed by government corporations. In 1950 exports totaled U. S. \$800,000,000 and imports, \$653,000,000. Main destinations of exports were the U.S.S.R. 28% and Poland, Rumania, Hungary and Bulgaria 21%. Main sources of imports were the U.S.S.R. 29% and Poland, Rumania, Hungary and Bulgaria 26%. Leading exports were iron and steel manufactures, machinery, textiles, glass and vehicles.

Czech railroads, totaling 8,200 miles in 1948, form a direct connection between the systems of eastern and western Europe, making the country an important communications center. Highway mileage totaled 39,560. Internal waterways and rivers connect Czechoslovakia with the Black Sea and the North Sea.

National budget estimates in recent years have been as follows (in billions of koruna):

	1952	1953	1954*
Revenue	324.3	435.2	87.8
Expenditure	323.5	430.9	87.6

\* The koruna was revalued May 30, 1953.

**NATURAL FEATURES AND RESOURCES; CLIMATE.** Czechoslovakia lies athwart the great central European watershed between the Baltic, Black and North Seas. Mountains form several of its boundaries. Many of the valleys are made fertile by the Danube, Elbe and Vitava (Moldau) rivers and their tributaries.

Most important of Czechoslovakia's varied minerals are pit coal and lignite, with the principal coal fields in the Ostrava-Karvinná area, connected with the Polish fields of Upper Silesia. Production for the year 1952 was estimated at 19,700,000 metric tons of hard coal and 33,000,000 tons of lignite.

Production of iron ore in 1952 was about 2,000,000 tons; much ore is imported to meet the demands of Czechoslovakia's flourishing iron and steel industry. Excellent porcelain raw materials, particularly kaolin, are obtained in western Bohemia and southern Moravia. Other minerals are antimony, gold, magnesite, oil, uranium, silver and zinc.

Czechoslovakia is one-third wooded and is one of the richest forest lands in Europe, with a high production of lumber.

At Prague, in Bohemia, the average annual temperature is 48.2° (29.6° in January; 66.2° in July) and the average annual rainfall is 19.6 inches. The corresponding figures for Presov, in eastern Slovakia, are 46.8° and 25.6 inches.



## Denmark (Kingdom)

(Kongeriget Danmark)

Area: 16,575 square miles.

Population (est. Jan. 1, 1953): 4,347,400 (almost entirely Danish).

Density per square mile: 262.3.

Sovereign: King Frederick IX.

Prime Minister: Hans Hedtoft.

Principal cities (est. 1954): Copenhagen, 758,300 (capital); Aarhus, 118,900 (ship-building); Odense, 104,300 (meat, dairy products); Aalborg, 82,000 (seaport).

Monetary unit: Krone.

Language: Danish.

Religion: Evangelical Lutheran (state).

**HISTORY.** A tiny nation, Denmark once was powerful and feared. After conversion of the Danes to Christianity in the 9th and 10th centuries, Canute the Great, King of Denmark, conquered England in 1015. In the 12th and 13th centuries, under Kings Valdemar I and II, Denmark reached the zenith of its power. By the terms of the Union of Kalmar in 1397, the nation was united with Norway and Sweden. Sweden left the Union in 1520, but Denmark and Norway remained united until 1814. In the Napoleonic Wars Denmark picked the wrong side; when Napoleon was defeated, Norway was given to Sweden and Helgoland to Britain in 1814. Denmark lost again in 1864 when, after a war with Austria and Prussia, it lost Holstein, Schleswig and Lauenburg to Prussia.

The country, which had become a liberal constitutional monarchy in 1849, stayed neutral in World War I, after which a plebiscite returned to it a part of North Schleswig. In 1917 Denmark sold the Virgin Islands to the United States for \$25,000,000.

On May 31, 1939, eager for peace, Denmark signed a ten-year non-aggression pact with Germany. Less than a year later, on April 9, 1940, Germany invaded neutral Denmark. The British countered by occupying the Faeroe Islands and Iceland. Iceland declared its complete independence from Denmark in 1944, thus breaking a union which had existed since 1280.

To save the country from destruction, King Christian X accepted the German occupation without armed resistance, and the Danish policy became one of passive resistance against Hitler's attempts to form a "model protectorate." During 1944-45, the Danish underground became increasingly active and effective.

Following the German surrender in 1945, the Danes quickly took over their government again with Social Democrat Vilhelm Buhl as prime minister. Buhl resigned when his party lost ground in the national elections of Oct. 30, 1945, and Knud Kristensen formed a new all-Liberal cabinet in Nov., 1945. He lost the confidence of the Folketing in Oct., 1947, and, after elections in which the Social Democrats increased

their plurality, Hans Hedtoft was named prime minister on Nov. 11, 1947. His party won the largest block of seats in the September, 1950, elections but was forced to yield the next month to a Liberal-Conservative cabinet headed by Erik Eriksen, a Liberal. Hedtoft returned to office in Sept., 1953, with an all-Social Democrat cabinet.

**RULER.** Frederick IX, of the house of Schleswig-Holstein-Sonderburg-Glücksburg, born March 11, 1899, became king April 20, 1947. In 1935 he married Princess Ingrid of Sweden, by whom he has three daughters: Margrethe (heiress apparent, born April 16, 1940), Benedikte (born 1944) and Anne-Marie (born 1946). The King's uncle is King Haakon VII of Norway.

**GOVERNMENT AND DEFENSE.** Under the constitution of 1953, Denmark is a hereditary monarchy. Legislative power rests jointly with the king and the unicameral Folketing of 179 popularly-elected members, two of whom represent the Faeroes and two, Greenland. The Folketing is elected for four years but is subject to earlier dissolution by the king. The constitution authorizes the transfer of some sovereign powers to international organizations under certain circumstances. The cabinet, presided over by the king, who designates the prime minister, is the highest executive power, handling new bills and important measures.

The lineup in the Folketing (elections of Sept. 22, 1953), was Social Democrat 74, Agrarian Liberal 42, Conservative 30, Radical Liberal 14, Communist 8, others 11.

Military service is compulsory. The army, numbering about 12,000, has been re-equipped with British assistance. The navy has 8 frigates and escort vessels, 3 submarines, 6 patrol vessels and several smaller craft.

**SOCIAL AND ECONOMIC CONDITIONS.** Under the Danish system, schooling is compulsory from 7 to 14 and, for the most part, free. The famous popular high schools (*folkehøjskoler*) for adults number 55, all private but assisted by the state. The Royal University of Copenhagen, founded in 1479, has about 5,700 students and that of Aarhus, about 1,550. Elementary, middle and secondary schools had 532,184 students in 1951. Illiteracy is practically unknown.

Social legislation is well advanced and provides for medical aid, poor relief, child welfare and workmen's compensation. The National Insurance Act requires everyone from 21 to 60 to belong to an approved sickness benefit society, to which the state also contributes. The co-operative movement is also well organized.

Approximately ninety per cent of the land is productive and about three-quarters is actually farmed. Agrarian reform

laws have operated to bring about a large number of small holdings. About two-fifths of the cultivated area is devoted to cereals, led by barley, mixed grain, oats, rye and wheat. Root crops (fodder), potatoes and sugar beets also are important. The principal source of exports and of the nation's wealth is dairy farming and the production of bacon and pork (1953: 480,000 metric tons), butter (173,000 tons), beef and veal (187,000 tons), eggs (134,000 tons), cheese (87,000 tons) and milk (5,380,000 tons). Livestock in 1953 included 3,070,000 cattle, 4,336,000 hogs and 24,251,000 poultry.

Denmark produces primarily for home consumption, though some industrial products, such as Diesel motors, are large exports. The largest industries are food-processing and iron and metal. Others include chemical and pharmaceutical, wood and paper, clothing, textiles, machinery, beverages and leather.

Trade statistics, in millions of kroner:

	1951	1952	1953
Exports	5,793	5,874	6,173
Imports	6,993	6,645	6,908

Leading suppliers in 1953 were Great Britain (28%), western Germany (18%), Sweden (9%) and the Netherlands (7%). Chief customers were Great Britain (40%), western Germany (11%), Sweden (5%) and the U. S. (4%). Leading exports were dairy products, largely butter and eggs (29%), meat and products (27%), machinery (9%) and live meat animals (5%). Leading imports included coal, coke, petroleum and products, machinery, vehicles and textiles.

The Danish merchant marine, one of the largest in the world on a per-capita basis, had 701 larger ships of 1,529,169 gross tons on June 30, 1953. Regular communications with foreign countries are mainly westward by sea. There are Swedish ferry services from Copenhagen to Malmö and from Helsingör (Elsinore) to Hålsingborg.

The main land route to the rest of the continent is the railway via Padborg and Schleswig to Hamburg. Railway mileage totals about 3,050, nearly half nationalized. Train-ferry services for inter-island communication are highly organized. Motor transport also is well advanced, with about 35,000 miles of roads.

Recent public-finance data are as follows (in millions of kroner):

	1952-53	1953-54*	1954-55†
Revenue	2,844	3,282	3,223
Expenditure	2,828	3,272	3,216

\* Preliminary. † Budget estimate.

The state debt proper on March 31, 1953, was 5,667,000,000 kr., of which 3,909,000,000 kr. represented the internal debt.

**NATURAL FEATURES AND RESOURCES;** **CLIMATE.** Denmark, only three miles from Sweden at the closest point, consists of the Jutland peninsula and the islands in the Baltic. The largest islands are Zealand, the site of Copenhagen; Fünen; and far to the east, Bornholm. The narrow waters to the north are called Skagerrak; and to the east, Kattegat.

The terrain of the whole kingdom is low but not flat. Its highest point is about 500 feet, and there are many lakes, ponds and short rivers. Sand dunes like the western Jutland coast almost without a break.

Mineral resources are negligible, although some coal, granite and kaolin are found on the island of Bornholm. Large quantities of coal and coke must be imported. Peat bogs supply an important source of fuel. Forest resources are unimportant.

The fishing industry, centered at Copenhagen but carried on also in the shallow fiords and in the deeper waters of the Baltic, North Sea and Skagerrak, is a basic part of the Danish economy. The 1953 catch of about 328,000 metric tons was valued at 205,000,000 kr.

Denmark's climate is like that of eastern England, but with colder winters and warmer summers. The average annual temperature is 45.2° (61° in July; 32° in January). Average rainfall is 24 inches; thunderstorms are frequent in summer.

## Outlying Territories

**FAEROE ISLANDS**—Status: Autonomous part of Denmark.

Area: 540 square miles.

Population (census 1950): 31,664.

Capital: Thorshavn (pop. 1950: 5,593).

Governor general: C. A. Vagn-Hansen.

Principal products: cod, whale oil, cod liver oil, wool, fertilizers, skins and leather.

This group of 21 islands, lying in the North Atlantic about 200 miles northwest of the Shetland Islands, joined Denmark in 1386 and has since been part of the Danish kingdom. The islands were occupied by British troops during World War II, after the German occupation of Denmark. The principal pursuits are fishing and sheep grazing. The Faeroes have home rule under a bill enacted in 1948; they also have two representatives in the Danish Folketing.

**GREENLAND**—Status: Integral part of Kingdom of Denmark.

Area: 839,782 square miles (almost 85 per cent glacier).

Population (est. 1951): 23,642 (native except for 1,061 Europeans).

Capital: Godthaab (second governor's seat, Godhavn).

Governor general: Poul Hugo Lundsteen.

Foreign trade (1952): exports, 56,600,000 kr.; imports, 41,100,000 kr. Chief exports: cryolite, fish, hides and skins, whale and fish oil, marble.



Greenland, the world's largest island, was colonized in 985-86 by Eric the Red. Danish sovereignty, which covered only the west coast, was extended over the whole island in 1917. In 1941 the United States signed an agreement with the Danish minister in Washington, placing it under U. S. protection during World War II but maintaining Danish sovereignty. A definitive agreement for the joint defense of Greenland within the framework of NATO was signed on April 27, 1951. A large U. S. air base at Thule in the far north was completed in 1953.

Under 1953 amendments to the Danish constitution, Greenland is part of Denmark and has two representatives in the Danish Folketing. There is a popularly elected council.

Greenland is the world's only source of natural cryolite, important in the manufacture of aluminum. Trade (except cryolite) is a Crown monopoly. Large deposits of lead, zinc and wolfram were found on the eastern coast of the island during the years 1948-52.

## Dominican Republic (República Dominicana)

Area: 19,327 square miles.

Population (est. 1953): 2,290,800 (mestizo and mulatto, 70%; white, 15%; Negro, 15%).

Density per square mile: 118.5.

President: Héctor Trujillo y Molina.

Principal cities (census 1950\*): Ciudad Trujillo, 181,533 (capital; sugar); Santiago de los Caballeros, 56,192 (tobacco); San Pedro de Macoris, 19,994 (sugar port); Puerto Plata, 14,419 (seaport).

Monetary unit: Dominican peso.

Language: Spanish.

Religion: Roman Catholic.

\* Preliminary.

**HISTORY AND GOVERNMENT.** The Dominican Republic (formerly San Domingo) occupies the eastern two-thirds of the island which Columbus named La Española (now Hispaniola) when he discovered it on his first voyage in 1492. The other third is occupied by the republic of Haiti. The capital, Ciudad Trujillo, founded in 1496, is the oldest white settlement in the Western Hemisphere.

The Dominican Republic was variously under Spanish, French and Haitian domination until it established its independence in 1865 and then plunged into an unstable political history. U. S. Marines occupied it from 1916 to 1924, when a new constitution was adopted. In 1930, Rafael Leónidas Trujillo y Molina, an army general, was elected president. In office most of the time during the succeeding 22 years, he brought about improved irrigation, roads, sanitation and schools. His brother,

Héctor, was elected unopposed to succeed him in May 1952.

The president is elected every five years by popular vote in which women take part, and he is eligible to be re-elected indefinitely. The 21-member Senate and the 47-member Chamber of Deputies are also elected for five years. Each of the twenty provinces has an appointed governor.

There is a 12,000-man army and a small air force. The navy has 2 destroyers, 9 frigates and escort vessels and other smaller craft.

**SOCIAL AND ECONOMIC CONDITIONS.** Education is free and compulsory from 7 to 14. In 1951, there were 2,749 schools with 262,499 students. The University of Santo Domingo had 2,254 enrolled. The illiteracy of the country was estimated at 38% in 1944.

Primarily agricultural, the country produces sugar (1952-53: 693,000 short tons), coffee (442,000 bags of 132 lb. each), cacao (33,070 short tons), tobacco, bananas, rice, corn, cassava, beans, sweet potatoes.

Sugar refining, largely U. S. controlled, is the only important manufacture.

Foreign trade (in millions of pesos):

	1951	1952	1953
Exports	118.7	115.0	104.2
Imports*	75.7	96.9	86.8

\* Includes duty-free merchandise.

Leading exports in 1952 were sugar (45%), coffee (23%), cacao (13%) and tobacco (5%). Chief customers were the U. S. (46%) and Britain (36%). The main imports, mostly from the U. S., are cotton goods, iron and steel products, chemicals and machinery.

Transit facilities include about 170 miles of public railway, more than 600 miles of sugar plantation railway, and more than 3,000 miles of highway.

The 1953 budget totaled \$89,000,000. The Republic's foreign debt was retired in July, 1947, and the internal debt was retired in 1953.

**NATURAL FEATURES; CLIMATE.** Crossed from northwest to southeast by a mountain range with maximum elevations exceeding 10,000 feet, the country has fertile, well-watered land on the northeast side, where nearly two-thirds of the population lives. The southwest part is arid and with poor soil except around Ciudad Trujillo. The country has many good harbors.

There is little range in temperature, with mean January average of 74°, and August average of 81°. The elevated interior is cooler than the coastlands. Rainfall occurs for the most part from May to November.



## Ecuador (Republic)

### (República del Ecuador)

Area: 104,510 square miles.

Population (est. 1952): 3,350,000 (60% pure Indian, 25% mestizo, 15% white).

Density per square mile: 32.1.

President: José María Velasco Ibarra.

Principal cities (census 1950): Guayaquil, 258,966 (chief port); Quito, 209,932 (capital); Cuenca, 39,983 (trading center); Ambato, 31,312 (commercial center).

Monetary unit: Sucre.

Languages: Spanish, Quéchua.

Religion: Roman Catholic.

**HISTORY.** Mostly forested and mountainous and a little larger than Colorado, Ecuador has a long history replete with the forceful rule of dictators. The Spanish under Francisco Pizarro conquered the land in 1532 by defeating the Inca Atahualpa. The first revolt against Spain occurred in 1809, but the victory was not complete until the Battle of Pichincha on May 24, 1822. Ecuador then joined Venezuela and Colombia in a confederacy founded by Simón Bolívar and known as Colombia, but withdrew amicably and became independent in 1830. The country's subsequent history has been largely one of dictatorships, notably under Juan José Flores, Gabriel García Moreno and Eloy Alfaro. Since 1900, administrations have fallen, usually by force, on the average of every two years. Shortly before the 1944 elections, President Carlos Arroyo del Río was forcibly replaced by José Velasco Ibarra, recalled from exile in Colombia. Velasco Ibarra, confirmed in office by the voters later in the same year, followed the old pattern by assuming the role of dictator in 1946 and suppressing opposition.

Velasco was deposed in Aug. 1947, and after three weeks of confusion Carlos Julio Arosemena took over as provisional president until Sept. 1, 1948, when Galo Plaza Lasso, victor in the June 6 elections, took office. Velasco was returned to office in the June 1952 elections.

For more than a hundred years, Ecuador disputed its boundary with Peru, frequently resorting to arms. After hostilities started again in 1941, both nations submitted to mediation, and in 1944 Ecuador lost most of the disputed area. The dispute broke out anew in 1951.

**GOVERNMENT AND DEFENSE.** Under the 1946 (16th) constitution, Ecuador elects a president for four years by direct vote, and he is ineligible for further service until at least one term intervenes. The congress is bicameral, with a Senate and Chamber of Deputies. There are 17 provinces and one territory, the Galápagos Islands (3,029 sq. mi.), 650 miles off the coast.

**Military service** is compulsory at eighteen. The army numbers 10,000 and 40,000

reserves. A 1,030-ton training ship and several smaller craft make up the navy. There is an aviation school at Guayaquil and also a naval school at Salinas. To strengthen the Panama Canal, the U. S. built a base on Galápagos during World War II; it reverted to Ecuador in 1946.

**SOCIAL AND ECONOMIC CONDITIONS.** Education is free, compulsory and under state control, but illiteracy is very high—an estimated 60 per cent in 1948. School enrollment in 1949-50 was put at 320,931 in 3,291 public and private primary schools and at 27,396 in 156 secondary schools. There are universities at Quito (2), Guayaquil and Cuenca, and a law school at Loja.

Although agriculture is the basis of Ecuador's economy, less than 12,000,000 acres are devoted to it. Cacao, the chief crop (1952-53: 24,436 metric tons) is grown in coastal regions and lower river valleys, along with rice, sugar cane, coffee, bananas, tobacco and cotton. The plateaus and mountain valleys are used for grazing and dairying, and raising cereals and potatoes. After textiles, one of Ecuador's main industries is the manufacture of Panama hats, made of Toquilla straw.

Foreign trade (in millions of sucres):

	1951	1952	1953*
Exports	852	1,190	1,130
Imports	789	870	1,091

\* Provisional.

Chief exports in 1953 were bananas (33%), coffee (25%), cacao (20%) and rice (10%). Leading customers were the U. S. (59%), Japan (7%) and Germany (6%); leading suppliers, the U. S. (58%), Germany (8%) and Belgium (6%).

Railway mileage in operation in 1949 was 698, all nationalized. The principal road connects the chief port, Guayaquil, with Quito. Highway mileage in 1950 was 5,859, of which 2,735 mi. were paved.

**NATURAL FEATURES AND RESOURCES; CLIMATE.** Two high and parallel ranges of the Andes, traversing Ecuador from north to south, are topped by tall volcanic peaks. The region between the mountains and the coast is rich but extremely hot and swampy.

Ecuador mined 23,131 troy oz. of gold and 86,600 oz. of silver in 1953. Copper and lead are also mined. In 1953, 2,966,700 barrels of petroleum were produced. The country is the world's chief source of light, strong balsa wood, and exported 4,343 metric tons in 1953. Exports of rubber reached a high of 3,035 metric tons in 1943; but no exports were reported in 1953. Dyewood, cinchona bark, kapok and vegetable ivory are other products of the vast forest.

Though Ecuador, as its name implies, lies on the equator, its climate ranges from tropical and temperate to the Arctic conditions of its snow-capped peaks. Temperatures on the coast average 83°; on the Andean plateau, about 46° to 70°. The rainy season extends from December through April or May.

## Egypt (Republic)

(Misr)

Area: approximately 383,000 sq. mi.

Population (est. 1953): 21,941,000.

(1944: Egyptian, 95.4%; Arabian, 1.7%; Greek, .6%; others, 2.3%).

Density per square mile: 57.3.

President (provisional): Mohammed Naguib.

Premier: Gamal Abdel Nasser.

Principal cities (census 1947): Cairo, 2,100,506 (capital); Alexandria, 925,081 (chief port); Port Said, 178,432 (Suez Canal terminus); Tanta, 139,965 (railroad center, Nile delta).

Monetary unit: Egyptian pound (£E).

Language: Arabic.

Religions: Mohammedan, 91%; Christian (mostly Copt and Greek Orthodox), 8%; others, 1%.

**HISTORY.** Egypt, half again the size of Texas, and the largest and most influential of the Arab states, has been an object of big-power controversy for centuries.

Egyptian history dates back to about 4000 B.C., when the kingdoms of upper and lower Egypt, already highly civilized, were united. Egypt's "Golden Age" coincided with the 18th and 19th dynasties (16th to 13th centuries B.C.), during which the empire was established. Persia conquered Egypt in 525 B.C.; Alexander the Great subdued it in 332 B.C., and then the dynasty of the Ptolemies ruled the land until 30 B.C., when Cleopatra, last of the line, committed suicide and Egypt became a Roman province. From 641 to 1517 the Arab caliphs ruled Egypt, and then the Turks took it and made it part of their Ottoman Empire. Napoleon's armies occupied the country from 1798 to 1801. In 1805, Mohammed Ali, leader of a band of Albanian soldiers, became Pasha of Egypt, founding the present line of rulers. After completion of the Suez Canal in 1869, the French and British took increasing interest in Egypt.

British troops occupied Egypt in 1882, and British resident agents became its actual administrators, though it remained under nominal Turkish sovereignty. On Dec. 18, 1914, this fiction was ended and Egypt became a British protectorate.

Pressure by Egyptian nationalists forced Britain to declare Egypt an independent, sovereign state on Feb. 28, 1922, although the British reserved rights for the protection of the Suez Canal and the defense

of Egypt. On Aug. 26, 1936, by an Anglo-Egyptian treaty of alliance, all British troops and officials were to be withdrawn, except from the Suez Canal zone. When World War II started, Egypt remained neutral. But it early became a strategic base for Allied forces, both because of its key location for countering German offenses in North Africa and because of the vital importance of the Suez Canal. British imperial troops finally ended the Nazi threat to Suez in 1942 in the battle of El Alamein, west of Alexandria.

British troops were evacuated from Cairo and Alexandria in 1946, but Anglo-Egyptian negotiations for revision of the 1936 treaty broke down after British refusal to recognize Egyptian sovereignty over the Anglo-Egyptian Sudan. Egypt brought the problem before the U. N. Security Council on Aug. 5, 1947, but the Council advised resumption of direct negotiations.

In Oct. 1951, Egypt abrogated the 1936 treaty and the 1899 agreement on the Sudan. Rioting and attacks on British troops in the Suez Canal zone followed, reaching a climax in Jan. 1952.

The army, led by Gen. Mohammed Naguib, seized power on July 23, 1952. On July 26, King Farouk abdicated in favor of his infant son. Naguib took over the premiership on Sept. 7, 1952, and promised far-reaching reforms. The monarchy was abolished and a republic proclaimed on June 18, 1953, with Naguib holding the posts of both provisional president and premier. He relinquished the latter post on April 18, 1954, to Gamal Abdel Nasser, leader of the ruling military junta. An agreement was reached with Britain on July 27, 1954, on broad terms for evacuation of the Suez Canal zone.

**GOVERNMENT AND DEFENSE.** A new constitution is to be drafted during a 3-year transitional period beginning in 1953, after which a popular referendum will be held to choose between a presidential and a parliamentary form of republican government. Under the former constitution the bicameral parliament had a senate of 177 members, two-fifths of whom were appointed by the king and the rest popularly elected for 10 years (half renewable every five years); and a Chamber of Deputies of 319 members popularly elected by universal male suffrage for five years unless sooner dissolved by the king.

Under the Anglo-Egyptian Treaty of 1936 the peacetime strength of British troops in the Suez Canal zone was set at 10,000, with 400 air force personnel, but no limit was set in time of war or international emergency. Military service for Egyptians is compulsory. The Egyptian army, strengthened and modernized during World War II, has about 160,000 men, including police



units under military control. The air force has about 150 combat planes, and the navy 10 frigates, 2 fleet minesweepers and other smaller craft.

#### SOCIAL AND ECONOMIC CONDITIONS.

Education is compulsory between the ages of 7 and 12. In 1950-51 there were 6,583 elementary schools with attendance of 1,332,543, and 177 secondary schools with 126,176 students. The University Mosque of el-Azhar in Cairo (founded A.D. 972) is the chief theological seminary of the Moslem world. The University of Fuad I in Cairo (founded 1908), the University of Farouk I in Alexandria (founded 1943) and the University of Ibrahim I had a total of 33,706 students in 1951-52. Illiteracy is extremely low, being placed at 88% in the latest estimate (1937).

The majority of the people are Sunni Moslems. The Christians are mainly Copts with an admixture of Armenian, Syrian and Maronite sects. The population divides generally into fellahin (peasantry) and townspeople of the same blood, the Bedouin or nomad Arabs of the desert, and the Berbers, who occupy the Nile valley between Aswan and Dongola. The foreigners are chiefly Greeks (whose main center is Alexandria), French, British and Italians. The density of population in the small inhabited area in the Nile valley and delta (about 13,600 sq. mi.) is far greater than that of either the Netherlands or Belgium.

Agriculture is the chief industry, engaging more than half the population. Only about 3.5 per cent (8,600,000 acres) of the total area is arable, and only about 6,000,000 acres are actually under cultivation, almost entirely in the Nile valley and delta. More than half the cultivated area comprises farms of less than 20 acres. Irrigation is indispensable to agriculture; the Aswan reservoir above the first cataract of the Nile holds up to 5,500,000,000 cubic meters of water and that of Gebel Aulia, in the Anglo-Egyptian Sudan, 2,000,000,000 cubic meters. In the delta and in middle Egypt, where perennial or canal irrigation is possible, two or three crops a year can be grown. The chief cash crop is cotton, of which Egypt is one of the world's leading producers.

Production statistics for 1953 were as follows: wheat, 1,547,000 metric tons; maize, 1,834,000 tons, rice (paddy), 652,000 tons; sugar, 206,000 tons; cotton (lint) (1952-53), 425,700 tons.

Other crops include beans, garden crops, dates and grapes. The pastoral industry is relatively unimportant except to the Bedouins in the eastern desert.

Industry includes sugar refining, cotton ginning, cement manufacture, milling and

pottery, soap and perfume making. The Sugar Company of Egypt holds a monopoly on the sugar refining industry.

Foreign trade statistics (in millions of Egyptian pounds) are as follows:

	1951	1952	1953*
Exports	203.1	145.1	137.4
Imports	242.1	223.1	175.2

\*Provisional.

In 1953, Egypt's chief customers were France (13%), India (12%), Britain (11%) and Italy (7%). Leading suppliers were the U. S. (16%), western Germany (10%), Britain (10%) and France (9%). Raw cotton (86%) was the chief export.

Imports included wheat, petroleum, fertilizers, iron and steel products, textiles and machinery and vehicles.

Navigable throughout its course in Egypt, the Nile is used largely as a means of cheap transport for heavy goods. The principal port is Alexandria. Railways link Cairo and Alexandria with Suez and nearly every town in the delta. The merchant marine had 65 ships (100 tons and over), aggregating 109,984 gross tons, on June 30, 1953. Cairo is a major airport.

Budget estimates for the fiscal year 1953-54 balanced revenue and expenditure at £208,000,000. The public debt was £208,000,000 on Feb. 28, 1953.

**NATURAL FEATURES AND RESOURCES; CLIMATE.** Egypt, at the northeast corner of Africa, is a very rough square, with the historic Nile flowing northward through its eastern third. On either side of the Nile valley are desert plateaus, spotted with oases. In the north, toward the Mediterranean, plateaus are low, while south of Cairo they rise to a maximum of 1,015 feet above sea level. At the head of the Red Sea, at the northeast corner of Egypt, is the triangular Sinai peninsula, between the Suez Canal and Palestine.

The Nile delta starts 100 miles south of the Mediterranean and fans out to a sea front of 155 miles between Alexandria and Port Said. From Cairo north, the Nile branches into many streams, the principal of which are the Damietta and the Rosetta, joined by a network of canals.

The most important minerals are manganese ore (1952: 209,200 metric tons), phosphate (1952: 527,100 tons) and petroleum (1953: 15,700,000 barrels). Gold, iron ochres, nickel, sodium carbonate, sulfate talc and tungsten also are mined.

Egypt has no forests. Total value of fishery products is about £2,000,000 annually, representing a catch of about 50,000 metric tons.

Except for a narrow belt on the Mediterranean, Egypt lies in an almost rainless



area, in which high daytime temperatures fall quickly at night. The mean temperature at Cairo varies between 53° in January and 84° in July; at Alexandria, between 57° in January and 81° in July. South of Cairo, pure desert conditions prevail; at Aswan the mean maximum temperature is 118°.

**SUEZ CANAL.** The Suez Canal, in Egyptian territory between the Arabian Desert and the Sinai peninsula, is an artificial waterway about 100 miles long between Port Said on the Mediterranean and Suez on the Red Sea. Construction work, directed by the French engineer Ferdinand de Lesseps, was begun April 25, 1859, and the canal was opened Nov. 17, 1869. The cost was 432,807,882 francs. The concession is held by a French company, *Compagnie Universelle du Canal Maritime de Suez*, in which the British government holds 295,026 out of a total of 652,932 shares. The concession expires Nov. 17, 1968, when it will revert to the Egyptian government. An agreement signed March 7, 1949, provided for greater Egyptian participation in management and profits. On the board of management of the canal are 1 Dutch, 1 American, 5 Egyptian, 16 French and 9 British directors.

#### SUEZ CANAL STATISTICS

Year	Ships	Net Tonnage	Receipts
1950	11,751	81,795,523	££26,700,500
1951	11,694	80,356,338	££26,160,000
1952	12,168	86,137,037	££26,729,900
1953	12,731	92,905,439	££28,901,200

In 1953, 33.7% of the tonnage was British, 15.0% Norwegian, 9.1% French, 8.6% Panamanian and 5.4% Liberian. Over 50% of the goods traffic of the canal consisted of crude petroleum and petroleum products.

#### ANGLO-EGYPTIAN SUDAN — Status: Anglo-Egyptian condominium.

Area: 967,500 square miles.  
Population (est. 1952): 8,766,000.  
Capital: Khartoum (pop. 1948: 71,400).  
Governor General: Sir Robert Howe.  
Prime Minister: Ismail el-Azhari.  
Foreign trade (1953): exports, ££44,418,754 (41% to Britain); imports, ££50,682,290 (42% from Britain). Chief exports: cotton (60%), cottonseed, gum arabic.  
Agricultural products: cotton (seed) (1952-53: 79,850 metric tons), cottonseed, millet, sesame, wheat, peanuts.  
Minerals: gold, salt.  
Forest product: gum arabic (exports 1951: 41,087 metric tons).

About one-fourth the size of Europe, Anglo-Egyptian Sudan extends from north to south about 1,200 miles and west to east about 1,000 miles. Before the revolt against Egyptian rule by the Arabized tribes under Mohammed Ahmed (the Mahdi) in 1882-84, the region was known

as Egyptian Sudan. Since its reconquest by the Anglo-Egyptian expeditions of 1896-98, it has been known by its present name.

Under the self-government statute promulgated March 31, 1953, executive power is exercised by the governor general, nominated by the British government and confirmed by Egypt. He is advised by the prime minister and a cabinet of from 10 to 15 Sudanese members. Legislative power is exercised by a bicameral parliament composed of a senate of 50 members, partly elected and partly appointed, and a chamber of deputies of 78 elected members. Certain defense and external relations matters are reserved to the governor general. The promulgation of the statute was preceded by an Anglo-Egyptian agreement on Feb. 12, 1953, which recognized the right of the Sudanese people freely to determine their political status at the end of a 3-year transitional period following election of a new parliament. The election, held in Nov.-Dec., 1953, resulted in a victory for the pro-Egyptian National Unionist party and its leader, Ismail el-Azhari, was named prime minister on Jan. 6, 1954.

The northern part of the country is peopled by Arabic-speaking Moslems, while in the backward south negroid pagan tribes predominate. Long-staple cotton, the chief export crop, is grown under irrigation in the Kassala and Tokar areas of the north and in narrow strips along the main Nile. Durra, peanuts, corn and oilseeds are grown elsewhere. Livestock raising is the occupation of most of the population. Most of the world's gum arabic comes from the semi-arid Kordofan area of the western Sudan; the southern forests are rich in fibers and tannins. Salt is produced at Port Sudan, and gold deposits are worked at Gebelt, near the Red Sea.

There are two trunk railways, one connecting Sudan with Egypt and the other affording access to the chief port, Port Sudan, on the Red Sea.

The northern region is a continuation of the Libyan Desert. The southern region is fertile, abundantly watered and, in places, heavily forested. It is traversed from north to south by the Nile, all of whose great tributaries are partly or entirely within its borders. The highest elevation is a mountain range parallel to the Red Sea, with heights of 4,000 to over 7,000 feet.

The whole country lies within the tropics and has an exceedingly hot climate—greatest in the central area and least in the desert zone, where the temperature range is large. At Khartoum the mean annual temperature is 80° and rainfall 5 inches.

## Estonia

Area: 18,357 square miles.

Population (est. 1940): 1,126,415 (Estonians, 88%; Russians, 9%; Germans [Balts], 1%; others, 2%); (est. 1950): 1,200,000.

Density per square mile: 61.4.

Principal cities (est. 1938): Tallinn, 146,400 (capital); Tartu, 60,100 (university town); Narva, 24,200 (seaport).

Language: Estonian (Finno-Ugrian).

Religions: Lutheran, 78%; Greek Orthodox, 19%; others, 3%.

Born out of World War I, this small Baltic state enjoyed two short decades of independence before it was absorbed again by its powerful neighbor, Russia. In the thirteenth century, the Estonians had been conquered by the Teutonic Knights of Germany, who reduced them to serfdom. In 1521, the Swedes took over, and the power of the German (Balt) landowning class was curbed somewhat. But after 1721, when Russia succeeded Sweden as the ruling power, the Estonians were subjected to a double bondage—the Balts and the tsarist officials. The oppression lasted until the closing months of World War I, when Estonia finally achieved independence.

Shortly after the start of World War II, the nation was occupied by Russian troops and was incorporated as the 16th republic of the U.S.S.R. In 1940, Germany occupied the nation from 1941 to 1944, when it was retaken by the Russians. Most of the nations of the world, including the U. S. and Great Britain, have not recognized the Soviet incorporation of Estonia.

## Ethiopia (Kingdom) (Abyssinia)

Area: 350,000 square miles.\*

Population (est. 1951): 15,000,000\* (Abyssinian [Amhara], 20%; Galla, 50%; others, 30%).

Density per square mile: 42.9.\*

Ruler: Emperor Haile Selassie I.

Prime Minister: Bitwoded Makonnen Endalkatchau.

Principal cities (est. 1951): Addis Ababa, 400,000 (capital); Harar, 45,000 (coffee); Dessie, 35,000 (grain center); Dire Dawa, 30,000 (railway workshops).

Monetary unit: Ethiopian paper dollar.

Languages: Amharic, Arabic.

Religions: Copt (Christian), Mohammedan.

\* Excluding Eritrea.

**HISTORY.** The historic origins of the Ethiopian state are unknown, but the royal family traces its origin (about 1,000 B.C.) to the Queen of Sheba and to Menelek, King Solomon's first son. Christianity was introduced about A.D. 330, and after the Arab conquest of northern Africa in the 7th century, Ethiopia was more or less cut off from the outside world for a

thousand years. When Theodore III proclaimed himself emperor in 1853, the country was a conglomeration of autonomous provinces under hereditary chiefs who were usually at war with one another. Menelek II, who ascended the throne in 1889, brought Ethiopia under single rule, and his forces finished off a five-year Italian attempt at invasion with a great massacre at Aduwa on March 1, 1896. Thereafter, Ethiopia moved in the orbit of England and France.

The defeat at Aduwa was not forgotten by Italy which, after creating fake border incidents, invaded Ethiopia on Oct. 3, 1935, despite the threat of League of Nations sanctions. Addis Ababa fell on May 5, 1936, and Ethiopia was amalgamated with Italian Somaliland and Eritrea into Italian East Africa.

World War II brought early liberation; Ethiopia, in fact, was the first of the Axis-occupied nations to be retaken by the Allies. British and Ethiopian troops reconquered the country in 1941, with the final Italian surrender occurring on Nov. 27. During a transition period thereafter, the nation was under dual Anglo-Ethiopian control. Under an agreement signed on Jan. 31, 1942, British troops quit the country except for stipulated border areas. The latter were evacuated in Aug., 1948.

After the war, the country launched a modernization program in agriculture, industry and education. Irredentist claims to the ex-Italian colonies and former Ethiopian provinces, Eritrea and Somaliland, began to be voiced in 1946. In December, 1950, the U. N. General Assembly voted to federate Eritrea with Ethiopia under the sovereignty of the Ethiopian crown, federation was effected Sept. 15, 1952.

**GOVERNMENT AND DEFENSE.** Emperor Haile Selassie I was born July 17, 1891, crowned king on Oct. 7, 1928, and emperor on Nov. 2, 1930. His eldest son, the crown prince and heir apparent, is Asfa Wassan, born on July 27, 1916. The emperor directly controls the government, though there now is a Council of Ministers, a Senate and a Chamber of Deputies. All members are appointed by the monarch, however.

In wartime, military service is compulsory. The small Ethiopian standing army is equipped and trained by a British military mission. A small Ethiopian force was dispatched to Korea in 1951.

**SOCIAL AND ECONOMIC CONDITIONS.** The education system is extremely backward. Foreign missions or the government maintain schools in the principal towns, and several secondary schools have been set up. There were 399 primary schools with 51,579 pupils in 1951-52 and 11 secondary schools with 2,170. Illiteracy is estimated at 70%. The Coptic Church (Chris-



tian), with its numerous priests, exercises powerful influence and owns much Ethiopian land. It became independent of the Coptic Archbishop of Alexandria in 1946. Moslems, numerous in frontier regions, have their religious center at Harar.

Ethiopia is generally fertile, predominantly agricultural and pastoral, with many regions yielding two crops a year. The chief crops are maize, wheat, barley, rye, cotton, sugar cane, millet, hemp, vegetables, coffee and teff (the common bread grain). The country's inadequate transport system, however, makes crop growing largely a local industry.

The country grazes several million cattle, and many goats and sheep. Horses and mules are bred extensively as pack animals and mounts. There is little manufacturing except for small native industry, although the Italians built some industrial plants during their five-year occupation.

Recent trade data (for years beginning Dec. 11, in millions of Ethiopian dollars):

	1950-51	1951-52	1952-53
Exports*	116.8	106.5	169.4
Imports	104.6	115.2	137.9

\* Excluding specie.

Chief exports in 1951-52 were coffee (47%), hides and skins (14%) and oilseeds (13%). Major imports were cotton piece goods, machinery, sugar and salt.

The 486-mile track from Addis Ababa to Djibouti in French Somaliland is Ethiopia's only rail outlet and its principal trade route. Motorable roads, non-existent until about 1925, now total 5,000 miles.

The 1951-52 budget estimated revenue at Eth. \$103,000,000 and expenditure at Eth. \$62,100,000.

**NATURAL FEATURES AND RESOURCES; CLIMATE.** Over its main plateau-land, Ethiopia has several high mountains. Most of the many rivers are rapid, not navigable, and flow into the Nile. The Blue Nile, or Abbal, rises in the northwest and flows in a great semicircle east, south and northwest before entering Sudan. Its chief reservoir, Lake Tana, lies in the northwestern part of the plateau.

Gold, produced from placer mines worked by natives in the south and west, is Ethiopia's main mineral. Platinum also is mined in fair commercial quantities. Other minerals are rock salt, cinnabar, copper, iron, mercury, mica, potash and sulfur. Oil deposits are believed to exist, and all drilling rights have been sold to the Sinclair Refining Company of the U. S.

Ethiopia, lying wholly within the tropics, escapes a torrid climate because of its elevation, although the lowlands are hot. The mean annual range of temperature is between 60° and 80°, although Alpine conditions prevail in the higher mountains.

Rainfall at Addis Ababa is about 50 inches annually.

**ERITREA—Status: Federated with Ethiopia.**

Area: 47,875 sq. mi.

Population (est. 1950): 1,100,300.

Capital: Asmara (population: 117,000).

Sovereign: Haile Selassie I.

Chief Executive: Ato Tedla Bairu.

Agricultural products: coffee, barley, tobacco, sesame, hides, skins.

Minerals: gold, salt, potassium salts.

Sea product: pearls.

The first Italian inroad into Eritrea came in 1870 when the port of Assab and adjacent territory were bought from a native sultan; with British approval, Italian troops occupied Massaua in 1885. By a decree of Jan. 1, 1890, Italian possessions along the Red Sea were united into the colony of Eritrea. In 1936 Eritrea became a part of Italian East Africa. British and Indian troops captured Asmara on Apr. 1, 1941, and Massaua a week later; the area, reduced to its pre-1936 borders, then came under British military administration. The U. N. General Assembly on Dec. 2, 1950, adopted a plan for federation of an autonomous Eritrea with Ethiopia under the sovereignty of the Ethiopian crown, federation becoming effective Sept. 15, 1952.

As an autonomous, self-governing area, Eritrea has its own elected assembly which selects the chief executive. It is also represented in the Ethiopian parliament. Matters reserved to the Ethiopian government include defense, foreign affairs, foreign trade, finance and communications.

The principal native elements are the Ethiopians and Tigrés, who have close ethnic, linguistic and religious ties with peoples in neighboring Ethiopia. Irrigation is essential in the coastal plains, and agriculture is practiced largely on the interior plateau (average elevation: 6,500 ft.) where the climate is suitable for European settlement.

Along the coast, the climate is excessively hot and humid, especially in June, September and October; mean annual temperature at Massaua is 86°; the thermometer often rises to 120° in summer, and rainfall is less than 8 inches a year.

## Finland (Republic)

(Suomen Tasavalta)

Area: 130,160 square miles.

Population (est. Dec. 31, 1953): 4,168,000 (Finnish, 91%; Swedish, 9%).

Density per square mile: 32.0.

President: Juho K. Paasikivi.

Premier: Ralf Toerngren.

Principal cities (est. Dec. 31, 1952): Helsinki, 386,301 (capital); Turku (Åbo), 104,996 (seaport, shipbuilding); Tampere, 103,-



759 (textiles, paper); Lahti, 45,587 (glass, lumber); Porl, 44,604 (timber).

Monetary unit: Markka (FM).

Languages: Finnish, Swedish.

Religions (1949): Evangelical Lutheran, 97%; Greek Orthodox, 2%; others, 1%.

**HISTORY.** The Finns, a people of possibly Mongolian origin, first settled their Montana-sized area about A.D. 100. King Eric IX of Sweden conquered them about 1155 and introduced Christianity. Under Swedish rule, which lasted for 650 years, the Finns retained considerable autonomy and were given their own parliament in the 17th century.

Political pressure growing out of the Napoleonic Wars forced Sweden in 1809 to cede Finland to Russia, which gave the Finns a constitution and set them up as a grand duchy. Out of the chaos and complexities of World War I, the Russian revolution of 1917 and a Finnish civil war in 1918 between "Reds" and "Whites" led by Baron Carl G. von Mannerheim, Finland emerged as a republic in 1919. A year later Russia ceded to Finland the Petsamo area with its ice-free Arctic port.

For the next twenty years Finland was generally orderly and prosperous except for vigorous suppression of Communists and a bloodless rightist uprising in 1932. In Nov., 1939, however, Russia attacked Finland to enforce territorial demands. The sturdy Finns stood off large-scale Red Army assaults for 105 days, but finally lost and ceded to Russia 10 per cent of the nation's area, including the Karelian isthmus. Under German pressure and somewhat in a spirit of revenge, the Finns joined the Nazis against Russia in 1941—and lost again.

Baron Mannerheim (who had led Finnish forces in both wars with the U.S.S.R.) became president in 1944, at a time when German defeat seemed inevitable. Finland severed relations with Germany on Sept. 2, signed an armistice and concluded a provisional peace treaty with Britain and Russia, Sept. 19. The U. S. had not declared war on Finland.

Pro-Russian Juho K. Paasikivi became premier on Nov. 11, 1944, and when Mannerheim resigned because of illness on March 4, 1946, Paasikivi was elected by the Diet to fill the unexpired presidential term. The premiership went to Mauno Pekkala, leader of the new Socialist Unity Party, advocating cooperation with Communists.

The Communists and their allies lost ground in the July, 1948, parliamentary election and on July 29, Karl August Fagerholm formed a Social Democrat government in which the leftist bloc was not represented. Paasikivi was re-elected for a full 6-year term in Feb., 1950, and on Mar. 17, Fagerholm was succeeded as premier by Urho Kekkonen at the head of a centrist

minority cabinet. The Communists retrieved part of their losses in the July, 1951, parliamentary elections. Kekkonen was succeeded on Nov. 17, 1953, by Sakari S. Tuomioja. After the Mar. 1954 elections, Swedish party leader Ralf Toerngren formed a coalition cabinet on May 5, 1954.

**GOVERNMENT.** Under the 1919 constitution, the 200 Diet members are popularly elected by a proportional representation system for three-year terms. The president, normally chosen for six years by an electoral college of 300 members nominated by the people, acts through his Cabinet headed by the prime minister. Suffrage is universal. Because of the many political parties, government usually is carried on by a coalition, with frequent cabinet changes.

Party standing in the Diet after the elections of March 1954 was as follows (1951 standings are shown in parentheses): Social Democrats, 54 (53); Agrarian, 53 (51); Communists, 43 (45); Conservatives, 24 (26); Swedish People's party, 13 (15); National, 13 (10).

The Swedish-populated Åland islands have an autonomous status under a statute passed in Oct. 1951.

**PEACE TREATY OF 1947.** The final peace treaty became effective Sept. 15, 1947; it confirmed the de facto cession to the U.S.S.R. of the Petsamo area, Viipuri and the Karelian region and also of the Porkkala-Udd area west of Helsinki for use as a Soviet naval base. Finland was to pay reparations of \$300,000,000 in kind (reduced to \$225,000,000 by the U.S.S.R. in 1948) over a period of eight years from Sept. 19, 1944. Reparations payments were completed in Sept. 1952.

The treaty limited Finnish defense forces to the following strengths: army, 34,400 personnel; navy, 4,500 personnel and a tonnage of 10,000; and air force, 3,000 personnel and 60 aircraft. The possession of bombers, submarines, atomic weapons and motor torpedo boats is prohibited.

**SOCIAL AND ECONOMIC CONDITIONS.** Illiteracy is very low (less than 1% beyond the age of 15). Education is compulsory from 7 to 15. In 1952 there were 6,354 elementary schools with 517,401 students and 345 secondary schools with 99,899 pupils. There are three regular universities, of which Helsinki has the largest enrollment (8,254 in 1952).

Only about 3 per cent of the land is under cultivation, and about 5 per cent in grassland. The chief crops (with estimated 1953 production in metric tons) are oats, 925,493; barley, 310,075; rye, 138,051; potatoes, 1,397,239. Grazing lands are extensive. In 1953 there were 1,156,059 cattle, 997,607 sheep, 434,365 hogs and (1952) 124,952 reindeer.

The leading Finnish manufactures are wood and paper (about one-third the total value), food, luxury items, machinery and textiles. Following the cession of the Karelian Isthmus and the city of Viipuri to the U.S.S.R., Finland lost valuable manufacturing areas. Helsinki is the principal industrial center.

Trade statistics, in billions of markkas:

	1951	1952	1953
Exports	199.19	164.96	131.55
Reparations*	12.40	8.22	....
Imports	155.44	182.08	121.86

\* Included in export totals.

Leading exports in 1953 were wood and wood products (40%), wood pulp (17%) and paper and products (20%). Leading suppliers were the U.S.S.R. (21%), Britain (16%), western Germany (8%) and Poland (7%). Chief customers were the U.S.S.R. (25%), Britain (22%), the U. S. (7%) and western Germany (7%).

According to *Lloyd's Register*, the merchant marine on June 30, 1953, had 342 ships (100 tons and over) aggregating 620,947 gross tons. The numerous lakes, many joined by canals, are busy transport routes. About 40,000 vessels and 18,000 timber rafts use the canals annually. There were approximately 39,100 miles of road in 1952. Railway mileage in 1954 totaled 3,136, almost entirely nationalized.

Recent public finance data are as follows (in billions of markkas):

	1952	1953	1954*
Revenue	205.0	223.8	183.2
Expenditure	204.2	221.2	183.1

\* Budget estimate.

The total public debt was estimated at 132,915,000,000 FM on Dec. 31, 1953.

**NATURAL FEATURES AND RESOURCES; CLIMATE.** Finland stretches 700 miles from the Gulf of Finland on the south to Soviet Petsamo, north of the Arctic Circle. Off the southwest coast are the Åland Islands (approximately 300), controlling the entrance to the Gulf of Bothnia. Finland has more than 60,000 lakes. Of the few rivers, only the Oulu (Uleå) is navigable to any important extent.

Finland has no coal or oil, and many of its ore deposits are remote from transportation. Finland's sulfide ore (production in 1953: about 1,055,000 metric tons) is 4 per cent copper, 26 per cent sulfur and 27 per cent iron, with some zinc, cobalt, gold and silver. Limestone, soapstone and red granite deposits are extensive, and uranium deposits are believed to exist. Wood and peat are the only natural fuels.

More than a third of Finland is covered with high quality timber, the nation's richest natural resource. Timber production in 1953 totaled about 870,000 standards; cellulose, 1,131,000 metric tons; me-

chanical pulp, 188,000 tons; paper, 714,000 tons; cardboard, 197,000 tons.

Finns have fished for centuries, not commercially, but for domestic consumption. The 1952 catch was about 24,000 metric tons.

Finland's long severe winters are moderated somewhat along the coast by prevailing southwest winds, but the summer lasts only about two and a half months. Southerly Finnish ports are icebound part of the year. Rainfall is light, with the driest months from May to September.

## France (Republic)

(République Française)

Area: 212,741 square miles.

Population (est. Jan. 1, 1954): 42,995,000. (1946: French, 94.2%; others, 5.8%).

Density per square mile: 202.1.

President: René Coty.

Premier: Pierre Mendès-France.

Principal cities (est. 1948): Paris, 2,800,000 (capital); Marseille, 700,000 (chief port); Lyon, 470,000 (silk, metal manufacture); Toulouse, 285,000 (tobacco; commercial center); Bordeaux, 250,000 (wine; seaport); Nice, 235,000 (resort center); Nantes, 210,000 (manufacturing).

Monetary unit: Franc.

Religion (est.): Roman Catholic, 97.5%; Protestant and others, 2.5%.

**HISTORY.** France was ancient Gaul when Caesar conquered a part of it in 57-52 B.C.; for several centuries thereafter it was bound to the Roman Empire. In the 5th century A.D., it was overrun by the Franks and other barbarian tribes. Between 768 and 814, Charlemagne created a Frankish empire covering most of Western Europe, but by the time Hugh Capet came to the throne in 987, his kingdom comprised only the region around Paris. For more than 300 years the Capets struggled to unify the many feudal fiefs.

Philip VI, cousin of the last Capet and first of the House of Valois, took the throne in 1328. Soon thereafter began the Hundred Years' War (1338-1453), the struggle over England's bid to seize the French crown. The English won at Crécy in 1346 and at Agincourt in 1415, but were defeated at Orléans in 1429 by the French forces led by Joan of Arc. Cruel persecution of French Protestants, the Huguenots, was followed by civil war and then the Edict of Nantes in 1598, by which the Huguenots received complete religious freedom from Henry IV, first of the Bourbons.

Splendor, wealth and the establishment of a colonial empire marked the long reign of Louis XIV from 1643 to 1715. Extravagance, however, forced Louis XVI to struggle with the problem of taxation at a time when the forces of revolution were coming to a head among France's lower and in-



tellectual classes. The French Revolution, of world significance for its impact on absolute rule, broke out in 1789. Louis XVI was deposed in 1792 and executed the next year. Then came the Reign of Terror as the revolution swung to excess, the Directory from 1795 to 1799, and the Consulate from 1799 to 1804, after which Napoleon was proclaimed emperor. Meanwhile, French armies were engaged on all sides, spreading French hegemony over most of western and central Europe. The final downfall came at Waterloo on June 18, 1815.

The restored Bourbon, Louis XVIII, reigned until 1824 and was succeeded by his reactionary brother, Charles X, who was overthrown in the revolution of 1830. His successor, Louis Philippe, was unseated in 1848; and succeeded by Napoleon's nephew, Louis. Inaugurated president of the Second Republic in 1848, Louis Napoleon became emperor as Napoleon III in 1852 but abdicated after France's defeat in the Franco-Prussian War of 1870-71. The resultant conflict between republicans and monarchists was resolved by the adoption of a republican constitution in 1875, which established the Third Republic to replace the provisional Republic set up in 1871.

Victorious with the Allies in World War I under Premier Georges Clemenceau, France emerged as the dominant power on the continent. From 1919 on, its aim was to keep Germany weak through a system of military alliances and by maintaining a strong French army.

The effort was a dismal failure. At home France was weakened by economic and political instability, with many short-lived cabinets. Germany became a dictatorship, with the full national energy bent toward war. The Third French Republic, permitting political freedom, bickered and argued away its years. The leftist "Popular Front" coalition cabinets of Léon Blum (1936-37) and Camille Chautemps (1937-38) were succeeded by the Radical and Radical-Socialist cabinet under Édouard Daladier, one of the men of Munich.

Paul Reynaud took Daladier's place on March 21, 1940, less than seven months after the start of World War II. In May, 1940, Hitler's armies finally poured into France and on June 16, the reins of government fell to Marshal Henri Philippe Pétain, who opposed continuation of the war. An armistice with Germany was signed June 22, dividing France into occupied and unoccupied zones. The Third Republic was voted out of existence on July 10 by the National Assembly at Vichy, and Unoccupied (Vichy) France became totalitarian, with Pétain as chief of state.

Meanwhile, in London, General Charles de Gaulle had formed on June 18, 1940, a

provisional French National Committee which received British recognition and represented the interests of free Frenchmen. De Gaulle's government-in-exile was moved to Algiers in June, 1943, as the French Committee for National Liberation.

After the liberation of Paris, De Gaulle formed a provisional government in the capital on Sept. 10, 1944. It remained in power as a theoretically non-political régime until the elections of Oct. 21, 1945, when a National Assembly was selected to draw up a new constitution and serve as an interim legislative body. De Gaulle was named provisional president on Nov. 13 but resigned soon after and was succeeded by Félix Gouin, a Socialist, on Jan. 23, 1946.

A new constitution was approved by a slim margin Oct. 13, and the Fourth Republic formally took shape early in 1947 with the election of Socialist Vincent Auriol as President, Jan. 16, and the confirmation of Socialist Paul Ramadier as premier, Jan. 22.

In the ensuing years a series of short-lived cabinets held office. Radical Socialist René Mayer, who took over Jan. 8, 1953, resigned on May 21, and after the longest cabinet crisis in French history, Independent Joseph Laniel was confirmed as premier on June 26, 1953. René Coty was elected president of the republic on Dec. 17, 1953, to succeed Vincent Auriol. Laniel's handling of the Indo-Chinese crisis, however, forced his resignation on June 12, 1954, and on June 17 Radical Pierre Mendès-France was confirmed as premier.

**GOVERNMENT AND DEFENSE.** Under the constitution of 1946, France is a secular, democratic and social republic. The dominant power in the new Republic is the National Assembly, whose members (627 in 1954) are elected by universal direct suffrage. There is also a Council of the Republic of 320 members elected by a complicated indirect procedure requiring 8 different elections. This house has only advisory and delaying powers and is definitely subordinate to the Assembly. The two Houses together elect the president of the Republic for a 7-year term, but his choice of a premier and the latter's choice of cabinet ministers require Assembly ratification. All ministers are collectively responsible to the Assembly for the general policy of the Cabinet and are individually responsible for their personal actions.

The National Assembly elections of June 17, 1951, divided the 627 seats as follows: De Gaullists 118, Socialists 104, Communists 103, moderate right-wing parties 98, Radical Socialists and affiliates 94, Popular Republicans 85, overseas deputies 23 (2 vacancies). The Communists polled 26.5% of the popular vote, De Gaullists 21.7% and Socialists 14.5%.



## FRANCE AND THE FRENCH UNION

Country	Area, sq. mi.	Population, estimated
<b>France</b>	<b>212,741</b>	<b>42,995,000 (1954)</b>
<b>Africa</b>		
French Equatorial Africa	969,111	4,406,000 (1950)
Chad	495,752	2,241,000 ( " )
Gabon	103,089	409,000 ( " )
Middle Congo	132,046	684,000 ( " )
Ubangi-Shari	238,224	1,072,000 ( " )
Cameroun	170,230	3,100,000 (1951)
Algeria	851,078	8,930,000 ( " )
Morocco	153,870	9,140,000 (1952)
Tunisia	60,209	3,600,000 ( " )
French West Africa	1,805,287	17,380,000 (1951)
Dahomey	44,749	1,474,000 (1949)
French Guinea	108,455	2,130,000 ( " )
French Sudan	461,389	3,137,000 ( " )
Haute Volta	121,892	3,044,000 ( " )
Ivory Coast	129,807	2,031,000 ( " )
Mauritania	364,092	524,000 ( " )
Niger	493,822	2,041,000 ( " )
Sénégal	81,081	1,994,000 ( " )
Togo	21,235	1,015,000 (1951)
French Somaliland	8,376	55,000 ( " )
Madagascar and dependences	229,438	4,535,000 ( " )
Réunion	970	266,000 ( " )
<b>America</b>		
St. Pierre and Miquelon	93	4,354 (1945)
French Guiana	34,740	35,000 (1949)
Guadeloupe	686	292,000 (1951)
Martinique	427	276,000 ( " )
<b>Asia</b>		
French India	197	337,000 (1951)
State of Viêt-Nam	127,259	23,073,000 (1950)
Cambodia	53,668	3,296,000 ( " )
Laos	91,428	1,214,000 ( " )
<b>Oceania</b>		
French Pacific Settlements	1,545	63,000 (1951)
New Caledonia and dependences	7,654	65,000 ( " )
New Hebrides	4,633	50,000 (1952)

France's 23rd postwar cabinet, approved June 19, 1954, had 4 Radicals, 4 Social Republicans (Gaullists), 3 Independent Republicans, 2 Democratic Unionists, 1 Popular Republican, 1 R.G.R. and 1 Overseas Independent. Communists have been excluded from the government since April 30, 1947.

**GOVERNMENT OF OVERSEAS TERRITORIES.** The French constitution of 1946 provided for establishment of the French Union, consisting of the French Republic (metropolitan France and the overseas departments, territories and trusteeships) and the associated territories and states. The overseas departments are Algeria (three departments), Martinique, Guadeloupe, French Guiana and Réunion.

The overseas departments and territories are represented in the National Assembly

by 75 deputies and in the Council of the Republic by 65. In addition the constitution provided for creation of a high council, consisting of nominees of the French government and of the associated states, and an Assembly of the French Union, with power that is mainly advisory. The Assembly, which met for the first time on Dec. 10, 1947, consists of 240 delegates, 120 of whom are elected by the French parliament, 75 by territorial assemblies overseas, and 45 by the associated states.

Article 61 of the constitution provides that the position within the Union of the associated states—tentatively described as French Morocco, Tunisia and the Federation of Indo-China—is "settled for each of them by the act which defines their relations with France." Both Morocco and Tunisia declined to modify their protected

status in favor of a closer bond with France. Viet-Nam, Laos and Cambodia, in Indo-China, became associated states.

**Defense.** French armed forces in Jan. 1953 (including the gendarmerie) totaled about 836,000 men, largely recruited under a conscription system providing for 18 months of service. The army had 12 divisions totaling about 608,000 men, and the air force 28 squadrons with 103,000 men. In Dec. 1953 the navy had 3 light aircraft carriers, 1 escort carrier, 2 battleships, 6 cruisers, 12 destroyers, 48 frigates and escort vessels, 14 submarines and several hundred smaller craft.

**SOCIAL AND ECONOMIC CONDITIONS.**  
**Education.** State elementary schools in 1952 numbered 70,009 with 3,922,855 students. There were also 10,848 private schools with 918,632 students. Students attending higher elementary schools, state and private, totaled 278,666. Pupils attending state secondary schools totaled 483,716; private, 347,014.

Higher education is provided chiefly in the universities, of which there are 17, with total enrollment of 142,019 in 1952. The University of Paris is largest, with an enrollment of almost 60,000.

**Religion.** The predominant faith is Roman Catholicism, but Church and State were separated in 1905. Diplomatic relations with the Vatican were resumed in 1921, and lesser church property was returned to diocesan associations in 1924.

**Population.** The people are not homogeneous, varying from section to section. During the inter-bellum period, the population remained almost static, with an increase of only 72,133 from 1931 to 1936 and a decrease of 3.3 per cent from 1936 to 1946. The birth rate also fell sharply (1925: 19.6; 1936-38 annual average: 14.8), but the end of World War II saw an uptrend, and there was an estimated rate of 18.6 in 1953.

**Agriculture.** The national economy of France is predominantly agricultural. Of the total area, approximately 40 per cent is ordinarily devoted to crops, 20 per cent to forests, 3 per cent to vines and two per cent to market and other gardening. The vast majority of holdings are small farms worked by the owners. France normally is almost self-sufficient in basic foodstuffs and leads the world in wine production.

Production of major crops, in metric tons, was estimated as follows in 1953: wheat, 8,845,000; rye, 464,000; barley, 2,268,000; oats, 3,570,000; maize, 784,000; sugar beets, 10,600,000.

Other important crops are potatoes, berries, fodder beets, fruits, hay, nuts and turnips. Silk culture once thrived in the lower Rhône valley, but production fell sharply between wars. Milk, butter and

cheese are important as exports. Livestock in Oct. 1952 included 16,281,000 cattle, (1951) 7,585,000 sheep and 7,222,000 hogs. Wine production in 1953 was estimated at 1,410,000,000 U. S. gallons.

**Industry.** Principal industrial areas are Paris, Artois, Lower Seine and Lyon; the textile industry is concentrated in the north. Leading manufactures are iron, steel, chemicals, textiles, automobiles, machinery and beet sugar. Industrial production in 1953 was estimated at 126% of the 1948 level.

#### FRENCH INDUSTRIAL PRODUCTION

Monthly averages, 1952 and 1953,  
in metric tons

Product	1952	1953
Pig iron and ferroalloys	814,000	722,000
Crude steel	906,000	833,000
Cement	736,000	769,000
Cotton yarn	21,400	22,500
Wool yarn	9,200	10,000
Rayon yarn	3,440	3,900
Electricity	3,202*	3,243*
Manufactured gas	207†	207†
Automobiles	30,830‡	30,690‡

\* Millions of kwh. † Millions of cu. m. ‡ Units.

**Trade.** Foreign trade statistics, in billions of francs, including the Saar:

	1951	1952	1953
Exports	1,461.4	1,361.9	1,325.8
Imports	1,592.8	1,552.5	1,402.4

Principal suppliers in 1953 were the French Union (25%), the U. S. (9%), western Germany (7%), Iraq (5%) and Britain (5%). Leading customers were the French Union (37%), Switzerland (8%), Belgium (6%), Britain (5%) and the U. S. (4%). Leading exports in 1952 were machinery and vehicles (18%), steel mill products (11%) and chemicals (7%).

**Communications.** The French merchant marine had 1,260 ships (100 tons and over) aggregating 3,825,783 gross tons on June 30, 1953, according to *Lloyd's Register*—fifth largest in the world on that date. Losses during World War II were heavy.

There are about 5,500 miles of navigable waterways, including canals, with a traffic of 43,650,000 metric tons in 1952. There are approximately 550 inland navigation ports, of which Paris, Rouen and Strasbourg each normally handle more than one million tons annually (Paris, more than ten million tons). Railway mileage in 1951 totaled 25,725. Railroads were merged in 1938 into the *Société Nationale des Chemins de Fer Français*, of which the government acquired controlling interest. Highway mileage in 1951 was 450,000, including 50,000 miles of national highways. Telephones totaled 2,644,910 on Jan. 1, 1953. Air France, nationalized on Jan. 1, 1946, operates on a world-wide basis.

**Finance.** France's postwar financial position has been extremely unstable. Recent data are as follows (in billions of francs):

	1952	1953	1954*
Revenue	2,737	3,049	3,095
Expenditure	3,609	3,861	3,660

\* Budget estimate.

On Dec. 31, 1953, the franc debt was 4,177,000,000,000 fr. and the foreign currency debt, 1,240,000,000,000 fr.

#### NATURAL FEATURES AND RESOURCES;

**CLIMATE.** With a maximum length of about 600 miles and a width of 550 miles, France is second in size to Russia among Europe's nations. Its coastline is about 1,950 miles. In the Alps near the Italian and Swiss borders is France's highest point—Mont Blanc, 15,781 feet. The forest-covered Vosges Mountains are in the northeast and the Pyrenees are along the Spanish border. Except for extreme northern France, which is part of the Flanders plain, the country may be described as four river basins and a plateau. Three of the streams flow west—the Seine into the English Channel, the Loire into the Atlantic, and the Garonne into the Bay of Biscay. The Rhône flows south into the Mediterranean. For about a hundred miles, the Rhine is France's eastern border. West of the Rhône and northeast of the Garonne lies the Central Plateau, covering about 15 per cent of France's area, and rising to a maximum elevation of 6,188 feet. In the Mediterranean, 115 miles east-southeast of Nice, is Corsica, the island of Napoleon's birth, with an area of 3,367 square miles.

**Minerals.** French coalfields, most extensive in the northeast, ordinarily supply about 70 per cent of domestic needs. Lorraine, Anjou and Normandy have valuable iron ore deposits. Provence has bauxite. Alsace has potash and oil. Limousin has kaolin, zinc, lead and tar.

Production in 1953 included coal, 52,-600,000 metric tons (excluding the Saar); iron ore, 42,400,000 tons; lead (smelter), 55,000 tons; petroleum, 2,600,000 barrels; bauxite, 1,115,000 tons; (1952) potash, 1,054,000 tons.

**Forests and Fisheries.** France, with more than 26,000,000 wooded acres, produces well over \$100,000,000 worth of forest products in a normal year, including resin, turpentine, timber and nuts. The annual fish catch (468,300 metric tons in 1952) is among the largest in Europe. Cod and sardines are usually the biggest items.

**Climate.** France's climate is temperate but varies from long cold winters and hot summers in the northeast, to the subtropical temperature of the Mediterranean coast with very mild winters. With no high western elevations to block moisture-laden winds from the Atlantic, all France has

adequate rainfall of 20 to 30 inches a year. The mean annual temperature at Paris is 50.5° (36.5° in January and 65.5° in July). The rainiest months are June and October, with February usually the driest.

## Andorra

This 191-square mile autonomous and semi-independent state on the Franco-Spanish border has been under the joint suzerainty of the French State and the Spanish bishops of Urgel since 1278. It is a cluster of mountain valleys inhabited by about 5,200 hardy and traditionally independent people whose principal pursuit is the tending of flocks. Catalán is the language spoken, and both French and Spanish currency are in use. Andorra is governed by a Council General of 24 members, elected for four years by the heads of families. A First Syndic, chosen by the Council, constitutes the supreme executive authority.

## French Union

### AFRICA

## Algeria (Part of Metropolitan France)

### (L'Algérie)

Governor General: Roger Léonard.

Principal cities (census 1948): Algiers, 315,210 (capital); Oran, 256,661 (seaport); Constantine, 118,774 (trading center); Bone, 102,823 (seaport; phosphates).

Monetary unit: French franc.

Languages: Arabic, French.

Religions: Mohammedan (natives), Roman Catholic, Jewish.

**HISTORY.** Algeria, more than three times the size of Texas and situated on the northern bulge of Africa, was of great strategic importance during World War II. After U. S. and British troops occupied it following the landings of Nov. 8, 1942, it became the headquarters of the provisional French government of General Charles de Gaulle until the summer of 1944. For many months during that period it was the headquarters of the Allied Expeditionary Force.

Algeria became a Roman colony after the fall of Carthage in 146 B.C. and was overrun by the Arabs in the 7th, 11th and 12th centuries. In the 13th century it became one of the three kingdoms founded on the ruins of the old Almohade Empire. Following a brief Spanish occupation, it went under Turkish suzerainty in 1518. For 300 years thereafter Algiers was the headquarters of the notorious Barbary pirates who preyed on Mediterranean shipping. The French ended Turkish rule by



taking Algiers in 1830, but it was not until 1847 that they were able to suppress a holy war instigated in 1839 by Abd-el-Kader.

French policy for a time vacillated between complete assimilation of Algeria as part of France, and a decentralized administration under a governor general. In 1896 the idea of assimilation was abandoned for a number of years. After France fell in 1940, Algerian government officials were loyal to Vichy, but their control was ended by the Allied invasion of Africa in 1942.

**GOVERNMENT.** In effect, Algeria is part of France. Its three departments are represented in the National Assembly by 15 deputies, and it is one of the ten military districts of France, with both French and natives subject to military service. The governor general is responsible to the Interior Ministry in the French cabinet rather than the Ministry for France Overseas. A statute enacted in Aug., 1947, gave Algeria an elected legislative assembly, but leadership of the government still remains with the governor general.

**SOCIAL AND ECONOMIC CONDITIONS.** Primary and secondary schools for Europeans are on French lines. Most natives do not go beyond the primary grades. The knowledge and use of French has spread widely among the natives, but the teaching of Arabic in all schools was made compulsory in 1946. There is a university at Algiers, with faculties of science, arts, law, medicine and pharmacy.

Approximately 86 per cent of the population is native, 12 per cent French and 2 per cent other European. The native population is Berber, with Arab admixture physically assimilated.

The area under cultivation is about 15,000,000 acres, more than 30 per cent of which is owned by European farmers, chiefly in the fertile coastlands. The principal crops are wheat, barley and oats. Algeria is a leading wine producer, with almost 7 per cent of the cultivated area devoted to vines. Production in 1953 was 462,000,000 U. S. gallons, one-third above normal. Olive trees are widespread; the average annual yield of oil is about 2,500,000 gallons. Tobacco, corn, vegetables, flax, silk, figs and dates are also produced. Much of the area is more adapted to grazing than to agriculture. In 1952 there were 5,000,000 sheep, 800,000 cattle, 3,000,000 goats and 150,000 camels.

European industries include those dependent on crops, such as distilling and oil and flour milling, as well as the making of leather, tobacco and matches. There are also small native industries, particularly the traditional carpet weaving.

Exports in 1953 were valued at 138,820,000,000 fr.; imports, at 202,693,000,000 fr. Chief exports were wine (35%), iron ore

(10%) and flour (8%). Chief imports were machinery and apparatus (7%), petroleum and products (6%) and sugar (6%). France took 70% of the exports and supplied 79% of the imports.

Algeria has 3,396 miles of railway. A central line runs from the Moroccan to the Tunisian frontier with branches north to all the ports and south into the Southern Territories. There is an excellent network of roads of more than 30,000 miles, and motor transport is well developed, including regular passenger and freight lines across the Sahara. Only French ships may normally trade between France and Algeria.

**NATURAL FEATURES AND RESOURCES; CLIMATE.** Northern Algeria extends inland for 185 to more than 200 miles. South of it are the big, economically unimportant Southern Territories. Low plains cover small areas near the coast, but 68 per cent of Algeria is a plateau between 2,625 and 5,250 feet above sea level. The region between the Sahara and the Mediterranean reaches a high point of 7,641 feet.

Most of the streams are periodic with the rains. The Chélif is the principal river, over 435 miles long. On the Saharan slopes, the oases or the hot sands absorb the streams as soon as they leave the mountain ridges.

Algeria is a leading producer of phosphates (1953: 602,700 metric tons). Iron ore of good quality is found near the Tunisian frontier and on the Oran coast (1953: 3,364,400 tons). Zinc, lead and salt are also important minerals; and small amounts of oil and coal are produced.

Rainfall averages 20 to 40 inches on the coast, and decreases to virtually none in the Sahara. On the coast, temperatures average about 52° in winter, 77° in summer. Inland, the winter average is about 40° and summer about 81°, although the Sahara summer average is 95° to 105°.

**CAMEROON (FRENCH CAMEROONS)—** Status: U. N. trust territory.

Capital: Yaoundé (population 50,000).

High Commissioner: André Soucoudaux.

Foreign trade (1953): exports, 13,122,000,000 fr. C.F.A.\*; imports, 14,028,000,000 fr. C.F.A.\* (32% from France). Chief exports: cacao (54%), fresh bananas, coffee, palm kernels and oil.

Agricultural products: cacao (exports 1952: 51,089 metric tons), palm kernels and oil, bananas, millet, sweet potatoes.

Minerals: diamonds, gold, tin.

Forest product: timber.

\* Colonies Françaises d'Afrique, equal to 2 metropolitan francs.

In 1884 the Cameroons became a German colony (Kamerun), and after the conclusion of World War I the region was divided as a League mandate between Britain and France, four-fifths of the area going to France. Placed under French trust-

teeship by the United Nations in 1946, the area has political and financial autonomy under a French High Commissioner, responsible to the French government. Cameroun joined the Free French movement in 1940. The chief port is Douala; the administrative center, Yaoundé, is located on the central plateau.

The climate is tropical and unhealthful for Europeans; not even in the cool months does the temperature generally fall below 70°. Rainfall is heavy on the coast (155 inches a year at Douala) and is fairly evenly distributed throughout the year.

**FRENCH EQUATORIAL AFRICA—Status:** Group of overseas territories.

**Governor General:** Paul Chauvet.

**Capital:** Brazzaville (population 83,579).

**Foreign trade (1953):** exports, 10,043,000,000 fr. C.F.A. (66% to France); imports, 14,800,000,000 fr. C.F.A. (58% from France). Chief exports: cotton (35%), timber (33%), coffee, diamonds, gold, cacao, palm kernels.

**Agricultural products:** cotton (1953 exports: 25,106 metric tons), coffee, cacao, palm kernels and oil.

**Minerals:** gold, diamonds, and lead.

**Forest products:** timber, rubber, copal gum, wax.

This area, an early slaving center, was first settled by France in 1839; French hegemony was subsequently extended by exploration and conquest of the native tribes. The territories declared for Free France following the armistice of June, 1940, and Brazzaville became capital of De Gaulle's Free French movement.

The governor general, responsible to the Minister for France Overseas in the French Cabinet, administers the area as an administrative unit with the aid of an administrative council; each of the four territorial regions (Gabon [Gabun], Middle Congo, Ubangi-Shari, Chad) has a governor responsible to him. There were, in 1951, 23,403 Europeans; most of the Africans are Negroes. There are Arab and Fulani settlements in the Chad region, and several Moslem sultanates. Natural resources, both forest and mineral, are vast but relatively unexploited. Once economically dependent on forest products, the country developed after World War II as a producer of cotton, diamonds and gold. The area is capable of exporting large quantities of hard okoumé wood, either in logs or in veneer form.

The climate is tropical—hot and humid—and the average temperature is about 80° (78° at Brazzaville), varying only slightly throughout the year. Rainfall averages about 60 inches annually, with no marked wet or dry seasons.

**FRENCH MOROCCO:** see MOROCCO

**FRENCH SOMALILAND—Status:** Overseas territory.

**Capital:** Jibuti (population 22,000).

**Governor:** Numa Sadoul.

**Foreign trade (1953, including ship stores):** exports, 2,837,000,000 Jibuti fr.\*; imports, 5,286,000,000 Jibuti fr. Chief exports: ship stores, hides, salt.

**Mineral:** salt.

\* 1 Jibuti franc = 1.64 metropolitan francs.

French Somaliland, at the southern entrance to the Red Sea, was acquired by France between 1883 and 1887 by treaties with the Somali sultans, although posts on the coast had been acquired in 1856. This small, largely arid and sparsely populated region is important chiefly because of the port of Jibuti, the main artery of Ethiopia's trade via the Jibuti-Addis Ababa railway. The area is administered by a governor, responsible to the French government and assisted by an administrative council. It adhered to the Free French movement in December, 1942.

## French West Africa (Group of Overseas Territories) (L'Afrique Occidentale Française)

**Governor General:** Bernard Cornut-Gentille.

**Principal cities (est. 1951):** Dakar, 330,000 (capital, chief port); (est. 1953) Abidjan, 160,000 (export center); (est. 1952) Bamako, 100,000 (Niger river port).

**Monetary unit:** Franc C.F.A. (Colonies Françaises d'Afrique, equal to 2 metropolitan francs).

**Languages:** French, native tongues.

**Religions:** Mohammedan, pagan.

**HISTORY AND GOVERNMENT.** The St. Louis Colony, founded in 1626 at the mouth of the Sénégal River, was probably the first permanent white settlement in French West Africa in which the French established themselves, largely for the purpose of pursuing the slave trade. After 1876 the coast settlements were extended steadily into the interior through a series of missionary and economic campaigns. In 1895 the colony of French West Africa was formed under one governor general by the unification of its various components.

The governor general of the area is appointed by the French government and is assisted by a legislative council and an elected assembly. Governors responsible to him administer the eight constituent territories—Sénégal, French Guinea, Ivory Coast, Dahomey, Haute Volta (re-established in 1947), French Sudan, Mauritania and Niger. Each of these has considerable autonomy, with the central government supervising services common to all.

The area is represented in the French National Assembly, the Council of the Republic, and the Assembly of the French Union.

**SOCIAL AND ECONOMIC CONDITIONS.** Attendance at elementary schools in 1952 was approximately 170,000. There were also



6,435 secondary school students and 2,250 technical school students.

No racial unity exists in French West Africa, and there is great variation of physique, manner, custom and language. The population is native except for approximately 63,000 Europeans (1951). Non-Negroid tribes include the Saharans, Moors, Tuaregs and Fulbé. About half the population normally is Mohammedan, but a number of tribes are spirit worshippers.

Agriculture has expanded rapidly in recent years. Millet, rice and maize are the principal food crops, and vegetable oils are a leading commercial product. Peanuts, the chief export crop (1952: 850,000 metric tons) are cultivated in Sénégal, and palm kernels and oil are produced in Dahomey and the Ivory Coast. Other products are coffee, cotton, cacao and bananas. Stock raising is important in French Sudan and Mauritania, relatively dry districts in the northern part of the area. Manufacturing is undeveloped except for small native industries. Expansion is hindered by limited power facilities.

Imports in 1953 totaled 55,242,000,000 fr. C.F.A., including cotton textiles, machinery, vehicles and metal products. Sénégal and the Ivory Coast account for over half the exports, which totaled 46,761,000,000 fr. C.F.A. in 1953 and included coffee (21%), peanuts (19%), peanut oil (17%) and cacao. France took 70% of the exports and supplied 68% of the imports.

The middle Niger and lower Sénégal Rivers are navigable, but French West Africa's railways (1950: 2,350 mi.) are more important as interior communications. Dakar, with the best harbor on the west African coast, is the principal port and also an important stop on international air routes between South America and Europe. There are several other good ports.

The estimated budget for 1951 balanced at 27,884,000,000 fr., over a third of which was the total local budget of the eight component territories.

**NATURAL FEATURES AND RESOURCES; CLIMATE.** The area, comprising a sixth of Africa, is half as big as Europe; it is generally a plateau broken by two mountain ranges. The Futa Jallon, from 2,300 to 4,900 feet in elevation, parallels the coast for about 430 miles, and Mount Nimba, on the Liberian border, rises 5,250 feet. There are also mountainous regions in the Sahara districts to the north. The Niger, 2,600 miles long, is the principal river.

Important minerals include diamonds, gold, iron ore and bauxite; production of gold has dropped sharply in recent years but large-scale exploitation of iron ore and bauxite deposits is in progress. Timber and precious woods are important, especially in the Ivory Coast.

The central and northern parts of the colony have two seasons, rainy and dry. In the southernmost regions there are two rainy seasons, separated by a short dry season. Average annual rainfall at St. Louis is 16.7 inches; at Dakar, 20.2 inches. Temperatures on the west coast average about 70° in winter and 82° in summer, with daily variation of about 20°.

**MADAGASCAR AND DEPENDENCIES—** Status: Overseas territory.

Capital: Tananarive (Antananarivo) (est. pop. 1950: 174,153).

Governor General: Robert BARGUES. Foreign trade (1953\*): exports, 14,837,-000,000 fr. C.F.A. (71% to France); imports, 22,635,000,000 fr. C.F.A. (74% from France). Chief exports: coffee (43%), cloves (10%), tobacco (7%).

Agricultural products (1952): rice, 900,-000 metric tons; raw sugar, 18,000 tons; coffee (exports), 41,811 tons; vanilla, manioc, bananas, maize, coconuts.

Minerals: graphite (1953 exports: 13,608 metric tons), mica, phosphates, gold.

Forest products: gum, medicinal plants, rubber, tannins, dyewoods.

\* Excluding Comoro Islands.

Madagascar, lying off the southeast coast of Africa, is the fourth largest island in the world, with a length of 995 miles and an average width of 250 miles. It remained independent under native rulers until 1885, when it came under French protection. French troops conquered the island in 1895 and it became a French colony the following year. The last native ruler, Queen RANAVALONA III, was exiled.

British troops landed on the island May 5, 1942, during World War II, and an armistice with Vichy French forces was signed November 5, 1942. The island is administered by a governor general responsible to the Minister for France Overseas in Paris, assisted by a General Assembly. Native nationalist outbreaks occurred in 1947, and French troops maintained order with difficulty.

The chief occupations are cattle raising (1953: 6,064,000 cattle) and agriculture; there are several food-processing and textile plants. The chief port is Tamatave on the east coast; the capital, Tananarive, is located on the central plateau. In 1951 there were about 52,000 French and 21,500 other European and Asian residents. The natives, collectively known as Malagasy, are divided into several tribes. Outlying dependencies include the islands of Europa, Juan da Nova, Bassas da India, Glorieuses and various scattered subantarctic islands known as Iles Australes.

The Comoro Islands (800 sq. mi.), formerly a dependency, became an autonomous overseas territory effective Jan. 1, 1947, and are represented in the French parliament, although still partly under the authority of French officials in Madagascar. They are located in the Indian ocean at



the north entrance of the Mozambique channel, about 300 mi. north of Madagascar. The Comoros consist of four main islands and several islets. The French administrator is assisted by a privy council and an elected general council. The population (165,000 in 1951) is largely Moslem. Exports include essential oils, sisal, vanilla, copra, cacao and cloves.

The climate of Madagascar is generally tropical, with a warm and wet season from November to April and a cool, dry season the rest of the year. Temperatures vary between 55.5° and 95° (at Tamatave, 80° in February, 68° in July). Rainfall varies from about 100 inches annually in the east and northwest to 16 inches in the south.

**RÉUNION (Bourbon)**—Status: Département of Metropolitan France.

Capital: St. Denis (population 39,057).  
Prefect: Pierre Philippe.

Foreign trade (1953): exports, 5,354,000,-000 fr. C.F.A. (63% to France); imports, 6,415,000,000 fr. C.F.A. (62% from France). Chief exports: sugar (84%), essential oils. Agricultural products: sugar, vanilla, coffee, maize.

Discovered by Portuguese navigators in the 16th century, the island, then uninhabited, was taken as a French possession in 1638. It is located about 450 miles east of Madagascar, in the Indian Ocean.

There is no indigenous population. About three-quarters of the inhabitants are of European origin; the remainder are Creoles, mulattoes, Negroes, Indians and other Asiatics. Tropical cyclones of hurricane variety are frequent during the change of seasons. Occasionally a *raz de marée* (tidal wave) does great damage. Temperature varies from about 62° to 78°. Sugar-cane cultivation and the production of rum are the principal occupations.

**TOGO**—Status: U. N. trust territory.

Capital: Lomé (population 30,063).

Commissioner: Laurent Péchoux.

Foreign trade (1953): exports, 2,753,000,-000 fr. C.F.A. (64% to France); imports, 2,079,000,000 fr. C.F.A. (49% from France). Chief exports: cacao (36%), coffee, palm kernels, copra, cotton.

Agricultural products: cacao, palm kernels and oil, cotton, copra, coffee.

Mineral: iron ore.

Forest products: dyewoods, oil palms.

Togo, a part of the former Slave Coast, lies between the British Gold Coast colony and French West Africa. Established as a German colony in 1884, the area was divided as a League mandate by France and Britain at the end of World War I, with France obtaining two-thirds of the total area. It was placed under U. N. trusteeship in Dec. 1946. Agriculture and grazing are the chief industries. In 1951, there were 1,500 Europeans. The coastline, only 32 miles long, is low, sandy and without harbors.

The coastland climate is hot, humid and unhealthy, with wet seasons lasting from March to June and from September to November. Rainfall is about 55 inches yearly in the south.

## Tunisia (Protectorate)

Ruler (Bey): Sidi Mohammed al-Amin.

Resident General: Pierre Volzard.

Prime Minister: Mohammed Salah M'Zall.

Principal cities (census 1946): Tunis, 364,593 (capital); Sfax, 54,637 (phosphate port); Bizerte, 39,327 (seaport and naval base); Sousse, 36,566 (seaport).

Monetary unit: French franc.

Languages: Arabic, French, Italian.

Religion: Predominantly Mohammedan.

**HISTORY.** Tunisia was settled by the Phoenicians and Carthaginians in ancient times. Except for an interval of Vandal conquest in A.D. 439-533, it was part of the Roman Empire until the Arab conquest of 648-69. Then it was ruled by various Arab and Berber dynasties until the Turks took it in 1570-74. The founder of the present dynasty, Hussein ben'Ali, was proclaimed sovereign by the occupation troops in 1705 and later succeeded in making the office hereditary, although subject to nominal Turkish sovereignty.

Throughout much of its history, Tunisia was essentially a pirate state, preying on Mediterranean shipping. In modern times, Italy became predominant economically in the area, but after French troops occupied the area in 1881, the Bey signed a treaty acknowledging a French protectorate.

Following the Allied landings in North Africa in 1942, Tunisia became a battleground with the Axis forces pinched between the British 8th Army advancing from Libya and the U. S., British and French forces from Algeria. The Axis units surrendered in May, 1943, and Tunisia was turned over to the De Gaulle government. On May 15, 1943, the reigning Bey, Sidi Mohammed al-Mounsaf, was removed and replaced by his cousin, the present ruler.

Fanned by Arab nationalist agitation elsewhere, the Tunisian nationalist party, *Destour*, although banned by the French, has intensified its activity in recent years. Its aim is the complete independence of Tunisia and its adherence to the Arab League.

**GOVERNMENT.** Although the Bey is theoretically sovereign, a French resident general directs the government, assisted by a cabinet headed by the prime minister with a majority of Tunisian ministers.

**SOCIAL AND ECONOMIC CONDITIONS.** In 1951-52, Tunisia's 680 public and 212 private schools had 194,528 pupils, about a fourth of them French and Italian. The Great Mosque at Tunis is a Moslem University.

Tunisia's population (by the 1946 census, 87.4 per cent Arab) is concentrated in

the cities and on the coast. There are about 100,000 nomads.

Agriculture is the chief industry. Over a quarter of the arable land is in wheat (1953: 562,000 metric tons). Other important crops are barley, oats, corn, sorghum, beans and peas. Wine production in 1953 was 17,600,000 gallons. Average annual olive oil production is about 45,000 metric tons (1953: 80,000 tons). The Cape Bon region is largely devoted to citrus fruits, the southern oases to dates. In 1951 there were 3,060,000 sheep, 76,000 horses, 44,000 mules, 162,000 asses, 476,000 cattle and 203,000 camels. Over 50,000 sheep and 4,000 tons of wool a year are exported.

Leading industries include flour milling, oil refining, lead smelting and distilling. Native industries include the spinning and weaving of wool, and the making of pottery and leather goods.

Tunisia, Algeria and France are under a single customs union for a number of products. Exports in 1953 were valued at 39,103,000,000 fr., of which 59% went to France. They included wheat (25%), phosphates (13%), iron ore (11%) and lead (7%). Imports were valued at 60,121,000,000 fr., of which 75% came from France. The leading items were machinery and apparatus (8%), petroleum and products (7%), sugar (6%), cotton textiles (5%) and clothing (4%).

There were 5,500 miles of roads in 1952, 1,300 miles of railway in 1951. Tunis, Bizerte, Sousse and Sfax are principal ports. **NATURAL FEATURES AND RESOURCES;** **CLIMATE,** Tunisia, at the northernmost bulge of Africa, thrusts out toward Sicily to mark the division between the eastern and western Mediterranean. It is mountainous in the north, covered by plains in the east, and projects southward to the Sahara area.

Tunisia's extremely rich deposits of phosphates are mined principally in the Gafsa and Kef regions. Production in 1953 was 1,718,600 metric tons. The iron ore is of good quality (1953: 1,057,200 tons). Other minerals are lead (1953: 37,900 tons), zinc, mercury, manganese, copper, salt and poor-grade lignite.

The climate is Mediterranean with mean temperature extremes at Tunis of 52.7° and 79.2°. Annual rainfall ranges from 24 inches in the north to less than five inches in the south.

## WESTERN HEMISPHERE

**FRENCH GUIANA (Including ININI)—****Status:** Département of Metropolitan France.

**Capital:** Cayenne (population 10,961).

**Prefect:** Robert Vignon.

**Foreign trade (1953):** exports, 157,000,000 fr. (71% to France); imports, 2,593,000,000 fr. (73% from France). Chief exports:

gold (32%), timber.

**Agricultural products:** bananas, cacao, corn, manioc, rice, sugar cane.

**Mineral:** gold (exports 1953: 4,900 troy oz.).

French Guiana, lying north of Brazil and east of Surinam (Dutch Guiana) on the northeast coast of South America, was first settled in 1626. Penal settlements, embracing the area around the mouth of the Maroni River and the Îles du Salut (including Devil's Island), were founded in 1852; they were replaced by refugee camps in the 1940's.

During World War II French Guiana at first adhered to the Vichy government, but the Free French took over in March, 1943. The large and scantily populated territory of Inini in the hinterland is administered separately. Economic development is extremely backward; transportation is almost entirely by water, conditions are unsanitary and large quantities of foodstuffs must be imported. Gold is the chief export.

January temperatures average 79°, September and October temperatures 82°. Rainfall is heavy.

**GADELOUPE—Status:** Département of Metropolitan France.

**Capital:** Basse-Terre (population 13,638).

**Prefect:** Jacques Brunel.

**Foreign trade (1952):** exports 9,966,000,000 fr.; imports, 12,439,000,000 fr. Chief exports: sugar (57%), bananas.

**Agricultural products (1952):** sugar (85,000 metric tons), bananas (72,155 tons), coffee, cacao, manioc, vanilla.

Guadeloupe, lying in the West Indies about 300 miles southeast of Puerto Rico, was discovered by Columbus in 1493. French colonization began in 1635. It consists of two large islands, separated by a narrow arm of the sea, and several outlying smaller islands. Most of the population is Negro and mulatto. The largest city and chief port is Pointe-à-Pitre (population 44,551). About half the cultivated area is devoted to sugar cane. The manufacturing of rum and spirits is the principal industry. Mean annual temperature is 78°. Average annual rainfall is 86 inches on the coast and much higher in the interior.

**MARTINIQUE—Status:** Département of Metropolitan France.

**Capital:** Fort-de-France (population 64,525).

**Prefect:** Christian Laigret.

**Foreign trade (1953):** exports, 6,883,000,000 fr. (81% to France); imports, 12,198,000,000 fr. (81% from France). Chief exports: sugar (43%), rum, bananas.

**Agricultural products:** sugar (1952: 43,000 metric tons), bananas, pineapples, cacao, coffee.

**Manufactures:** rum, sugar.

Martinique, lying in the Lesser Antilles about 300 miles northeast of Venezuela,



was probably discovered by Columbus in 1502 and was taken for France in 1635. Following the Franco-German armistice of 1940 it had a semi-autonomous status under the High Commissioner, Admiral Georges Robert, until 1943, when he relinquished his authority to the Free French. The area, administered by a prefect assisted by an elected council, is represented in the French legislature. The population is mainly Negro and mulatto. Most of the arable land is devoted to sugar cultivation. Fort-de-France, the capital and chief commercial center, has an excellent harbor. Mean annual temperature of the coast region is 80° (77° in January, 83° in June); annual rainfall is 87 inches.

**ST. PIERRE AND MIQUELON**—Status: Overseas territory.

Capital: St. Pierre (population 3,636).

Administrator: Irénée Davier.

Foreign trade (1953): exports, 182,000,000 fr. C.F.A. (42% to France); imports, 608,000,000 fr. C.F.A. (50% from Canada). Chief export: fish and products.

The sole remnant of the French colonial empire in North America, these islands were first occupied by the French in 1660. Their only importance arises from proximity to the Grand Banks (10 mi. south of Newfoundland) making them the center of the French Atlantic cod fisheries.

## ASIA

**FRENCH INDIA**—Status: Overseas territory.

Capital: Pondichéry (population 53,101).

Commissioner: André Ménard.

Chief exports: peanuts, cotton textiles.

Agricultural products: peanuts, manioc, rice, onions.

French India is a collective name for the scattered French possessions in India—on the Coromandel coast are Pondichéry, Karaikal and Yanam; on the Malabar coast, Mahé. The chief possession is Pondichéry, founded by the French in 1674. The commissioner, responsible to the Minister for France Overseas in Paris, is assisted by a representative assembly. More than 90 per cent of the population of French India is Hindu.

Chandernagor, in Bengal, formerly part of French India, was transferred to India on May 2, 1950, in accordance with a popular referendum. The future status of the remainder of French India is also to be determined by referendum.

## Indo-China

Commissioner general: Gen. Paul Ely.

Ruler, Viêt-Nam: Bao Dai.

King, Cambodia: Norodom Sihanouk.

King, Laos: Sisavang Vong.

Principal cities (est. 1949): Saigon (including port of Cholon), 256,000 (capital, Viêt-Nam); Hanoi, 166,000 (commercial center, Viêt-Nam); Phnom-Penh, 128,950

(capital, Cambodia); Haiphong, 92,000 (seaport, Viêt-Nam).

Monetary unit: Plaster.

Languages: Annamese, Cambodian, French.

Religions: Buddhism, Christianity (4%).

**HISTORY.** Indo-China, at the southeast corner of Asia, first met the West in the 16th century, when Portuguese traders and missionaries arrived.

French influence dates from 1787, and in the 19th century France received preferential treatment for helping the emperor of Annam recover his throne. During the last half of the century, France gradually extended influence over the whole of Indo-China.

Until the beginning of World War II, Indo-China was an administrative federation of one colony—Cochin-China; four protectorates—Annam, Tongking, Cambodia and Laos; and a special territory—Kwangchowan (returned to China in 1945). These had various degrees of native rule, but the real administrator of each unit was the French chief resident.

After France fell in 1940, Vichy authorized the entry of Japanese troops, and the country became one of the springboards for the Japanese campaign against Singapore. When, in March, 1945, the Japanese seized control of the whole country, Annam and Cambodia declared their independence. After the Japanese surrender, British and Chinese troops occupied Indo-China in the face of a growing nationalist movement, and restored order for the French authorities, who assumed control officially on March 4, 1946.

The Republic of Viêt-Nam—comprising Tongking and the northern part of Annam—was then recognized on March 6, 1946, as a free state within the Indo-Chinese Federation and the French Union. The French refusal to accede to demands of Viêt-Nam leaders headed by Dr. Ho Chi Minh, a Communist, for the accession of Cochin-China to the new state and the continued landing of French troops led to the outbreak of hostilities with Ho Chi Minh's adherents (called Vietminh) in Dec. 1946.

Amid the hostilities, protracted negotiations ensued regarding the future legal status of Indo-China. France installed Bao Dai, former emperor of Annam, as head of a new French-supported state of Viêt-Nam (to which Cochin-China acceded in 1949) and under agreements concluded with Viêt-Nam and subsequently with Laos and Cambodia, all of which were finally ratified in 1950, the three states were recognized with some reservations as independent associated states within the French Union.

Meanwhile, the Vietminh forces, organized as the Democratic Republic of Viêt-



Nam and recognized by the U.S.S.R., Communist China and other states of the Soviet bloc, acquired a hold on most of Viêt-Nam outside the large urban centers and heavily settled delta areas which, with the aid of Communist Chinese logistical support, they held and even extended despite persistent pressure by French and associated troops. In early 1953 the Vietminh spread the conflict into Laos and in April 1954 into Cambodia. In the meantime, the three states sought and received from France concessions enlarging the independence that they had won in 1950.

Proposals for settlement of the conflict were taken up by the Big Four conference at Geneva in May 1954, with representatives of Communist China, Viêt-Nam, Laos, Cambodia and the Vietminh also participating. Armistice agreements were signed at Geneva on July 21, 1954. Viêt-Nam was cut about in half along the 17th parallel, the northern part going to Vietminh. Elections for a unified government of Viêt-Nam were to be held within 2 years.

**GOVERNMENT.** Indo-China (excluding the Vietminh territory) is made up of the state of Viêt-Nam (comprising the former state of Cochín-China and part of Annam), Laos and Cambodia. Each of the three is an independent and self-governing state within the French Union. The Union is represented in Indo-China by a high commissioner who coordinates services common to the three states, such as the fiscal, immigration and customs services. The high commissioner is represented in each state by a commissioner.

**SOCIAL AND ECONOMIC CONDITIONS.** Viêt-Nam, consisting primarily of the densely populated eastern and southeastern coastal areas, contains about 85 per cent of the population of Indo-China. The majority of its population is Annamese and speaks the Annamese language. The kingdom of Cambodia, in the southwest, contains part of the Mékong river delta and is populated largely by Cambodians, who speak their own language. Laos, in the west and northwest, is sparsely populated by the Laotians and 3 ethnical minorities who belong to the Thai, Indonesian and Chinese races.

Rice, grown on five-sixths of the cultivated land, employs and feeds most of the population, and is normally the leading export and chief source of wealth. Production, centered in Cochín-China, ordinarily averages up to 4,500,000 metric tons annually (1953-54: 6,200,000 tons). Other crops include maize, sugar, cotton, tobacco, tea, coffee, peanuts, sweet potatoes and beans.

Indo-China is largely an exporter of raw materials. Its factories are small and process goods for local consumption or agricultural and forest products for export. Most important are the rice and saw

mills. There are also cotton and silk textile factories, sugar refineries, match, cement and paper factories.

Viêt-Nam, Cambodia and Laos make up a single customs union. Exports in 1953 were 34,575,000,000 fr.; imports, 134,267,000,000 fr. The chief exports were rubber (36%), rice (34%) and cement (5%). Principal customers were France (21%), the U. S. (16%) and Japan (14%). France (77%) and the U. S. (4%) were the leading suppliers.

Indo-China has several thousand miles of rivers and canals, including the Mékong River, which is navigable for two-thirds of its course. There are about 2,000 miles of railways. An excellent highway system includes 5,563 miles of improved road, and 11,477 miles of local road.

Mining is most developed in Tongking. Output of coal in 1953 was 831,900 metric tons. Iron ore, tin, zinc, tungsten, gold, phosphates, manganese, bauxite and lead are also mined.

Forests cover 76,570,000 acres of Indo-China. The high mountain ranges of the north supply valuable tropical hardwood, bamboo, lacs and vegetable oil. Laos has rich teak forests. Rubber production in 1953 was 72,354 metric tons, more than pre-World War II output. The industry centers in south Viêt-Nam and Cambodia.

**NATURAL FEATURES AND RESOURCES; CLIMATE.** Indo-China has two great delta regions—the Mékong in the south and the Song Koi (Red) in the north. These are separated by the Annam Mountains, and to the west of them are the mountainous continental regions of Laos. The climate is monsoonal, with nearly all of the very heavy rainfall between May and October; April and May are the hottest months.

## OCEANIA

**FRENCH PACIFIC SETTLEMENTS—Status:** Overseas territory.

Governor: René Petitbon.

Capital: Papeete, on Tahiti (population 1946: 12,428).

Foreign trade (1952): exports, 501,000,000 fr. C.F.P.\*; imports, 813,000,000 fr. C.F.P. Chief exports: copra, phosphate, vanilla.

Agricultural products: coconuts, sugar, vanilla, tobacco.

Mineral: phosphate (exports 1952: 213,555 metric tons).

\* Colonies Françaises du Pacifique, equal to 5½ metro-politan francs.

The term French Pacific Settlements is applied to the scattered French possessions in the eastern Pacific—Mangareva (Gambier), Makatea, Marquesas Islands, Rapa, Rurutu, Rimatara, Society Islands, Tuamotu Archipelago, Tubuai and Raivavae—which were organized into a single colony in 1903. The appointed governor is assisted by an administrative council. The principal and most populous island—Tahiti, in

the Society group (pop. 1946: 24,820)—was claimed as French in 1768. Plebiscites conducted in September, 1940, gave support to the Free French movement of Gen. de Gaulle. The natives are mostly Polynesians. The climate of Tahiti is hot and humid, but not unhealthful.

#### NEW CALEDONIA AND DEPENDENCIES

—Status: Overseas territory.

Capital: Nouméa (population 20,000).

Governor: Raoul Angammaine (also French Commissioner General in the Pacific).

Foreign trade (1953): exports, 1,428,000,-000 fr. C.F.P.; imports, 1,369,000,000 fr. C.F.P. Chief exports: nickel, chrome ore, coffee, copra, shells.

Agricultural products: coffee, copra, corn, cotton, manioc, rice, tobacco.

Minerals (1953): nickel (5,700 metric tons, matte); chromite (121,200 tons); manganese ore (5,300 tons).

Sea product: mother-of-pearl.

New Caledonia (6,533 sq. mi.), lying about 1,070 miles northeast of Sydney, Australia, was discovered by Captain James Cook in 1774 and annexed by France in 1853. The government, in the hands of an appointed governor and an elective council, also administers the Isle of Pines, the Wallis Archipelago, the Loyalty Islands, the Chesterfield Islands, Walpole, the Huon Islands, Futuna and Alofi, with a total area

of 1,121 square miles. The area—taken over in the summer of 1940 by the Free French after a bloodless revolution—is one of the richest of the Pacific islands in mineral resources, particularly nickel and chrome ore. The natives are Melanesians; about one-third of the population is white and one-fifth Indo-Chinese and Javanese. A French penal colony was established in the 19th century. Average temperature on New Caledonia varies between 65° and 72°.

**NEW HEBRIDES**—Status: Anglo-French condominium.

Capital: Vila (population 1,200).

Foreign trade (1953): exports, 226,727,-000 fr. C.F.P.; imports, 184,555,000 fr. C.F.P. Chief exports: copra (82%), cacao.

Agricultural products: coconuts, cacao, coffee.

Sea products: trochus and burghaus shell.

The New Hebrides, under joint Anglo-French administration since 1914, lie northeast of New Caledonia. The islands, about 40 in number, joined the Free French movement after a plebiscite in July, 1940. Most of the natives are Melanesians of mixed blood; there were 350 British and 1,300 French in 1951. The largest island is Esprit Santo (875 sq. mi.). The French and British high commissioners in the Pacific are represented by resident commissioners.

## Germany

**HISTORY.** In Caesar's time, the territory that is now Germany was inhabited by barbarous tribes that came originally perhaps from Central Asia. One of these Germanic tribes, the Franks, attained supremacy in western Europe under Charlemagne, who was crowned Holy Roman Emperor in A.D. 800. By the Treaty of Verdun (843), Charlemagne's lands east of the Rhine were ceded to the German prince Louis. Additional territory acquired by the Treaty of Mersen (870) gave Germany approximately the area she maintained throughout the Middle Ages. For several centuries after Otto the Great was crowned king in 936, the German rulers were also usually heads of the Holy Roman Empire.

Relations between State and Church were changed by the Reformation, which began with Martin Luther's 95 theses, and came to a head in 1547, when Charles V scattered the forces of the Protestant League at Mühlberg. Freedom of worship was obtained by the Peace of Augsburg (1555), but a Counter Reformation took place later, and a dispute over the succession to the Bohemian throne brought on the Thirty Years' War (1618-48) which devastated Germany and left the empire divided into hundreds of small principalities virtually independent of the em-

peror. Meanwhile, Prussia was developing into a province of considerable strength. Frederick the Great (1740-86) reorganized the Prussian army and defeated Maria Theresa of Austria in a struggle over Silesia. The conflict with revolutionary France hastened the disintegration of the empire, and in 1806 Francis II of Austria laid down the Imperial German crown. After the defeat of Napoleon at Waterloo (1815), the struggle between Austria and Prussia for supremacy in Germany continued, reaching its climax in the defeat of Austria in the Seven Weeks' War (1866) and the formation of the Prussian-dominated North German Confederation (1867).

At the close of the victorious war with France (1870-71), William I, King of Prussia, was crowned Emperor of Germany (Jan. 18, 1871). Under the guidance of the Imperial Chancellor, Prince Bismarck, Germany took a new place in world affairs, at the same time expanding her foreign trade and home industry rapidly. The Triple Alliance was formed with Austria and Italy in 1882. However, upon the accession of William II (1888-1918), Bismarck was dismissed and Russia was alienated. International rivalry was intensified in the early years of the 20th century, culminating in World War I, in which Germany,



supporting Austria-Hungary's demands on Serbia, suffered final defeat. By the terms of the Treaty of Versailles (1919) Germany lost about 27,000 square miles of territory, including all her colonies, plus Alsace-Lorraine, northern Schleswig, Eupen-Malmédy, Upper Silesia, and considerable areas in the east. William II had abdicated (Nov. 9, 1918), and a federal republic was organized under the constitution adopted at Weimar in 1919. The constitution was attacked by both the Right and Left; several Communist uprisings took place in the early 1920's, and in 1923 Adolf Hitler's abortive putsch was defeated. Germany's inability to fulfill the heavy reparations demands stipulated by the Treaty of Versailles led to French occupation of the Ruhr (1923-25). National bankruptcy was avoided by adoption of the Dawes Plan (1924) and later, the Young Plan.

The chancellorship of Brüning, leader of the Catholic Center party (1930-32), saw increasing economic and financial distress and the practical cessation of reparations payments. Hitler's rising National Socialist party won a plurality in both the July and November Reichstag elections in 1932, but not until the failure of Franz von Papen and Kurt von Schleicher to form governments did President Hindenburg name Hitler chancellor (Jan. 30, 1933). With the death of Hindenburg in 1934, Hitler became complete master of Germany, which he rapidly converted into a totalitarian state under the aegis of the Nazi party. All other political parties were banned, and the Jews were subjected to severe persecution. Through his foreign policy, Hitler repudiated the Treaty of Versailles and began full-scale rearmament. In 1935 he withdrew from the League of Nations and in 1936 he reoccupied the Rhineland and signed the anti-Comintern pact with Japan, at the same time strengthening relations with Italy. Austria was annexed in March, 1938. By the Munich agreement (Sept., 1938) he gained the Czech Sudetenland, and in violation of this agreement he completed the dismemberment of Czechoslovakia in March, 1939. But his invasion of Poland on Sept. 1, 1939, precipitated British and French declarations of war.

On May 8, 1945, Germany surrendered unconditionally to Allied and Soviet military commanders, and on June 5 the four-nation Allied Control Council became the *de facto* government of Germany.

At the Berlin (or Potsdam) Conference (July 17-Aug. 2, 1945) President Truman, Stalin and Prime Minister Attlee set forth the principles by which the Allied Control Council was to be guided. They were: Germany's complete disarmament and demilitarization; destruction of its war potential; rigid control of industry; decentralization

of the political and economic structure. Pending final determination of territorial questions at a peace conference, the three victors agreed in principle to the ultimate transfer of the city of Königsberg (now Kaliningrad) and its adjacent area to the Soviet Union and to the administration by Poland of former German territories lying generally east of the Oder-Neisse line.

For purposes of control, Germany was divided in 1945 into four national occupation zones, each headed by a military governor, assisted by appropriate supervisory and operating staffs.

Efforts to unify Germany were totally unsuccessful, and the western powers were unable to agree with the U.S.S.R. on any fundamental issue. Work of the Allied Control Council was hamstrung by repeated Soviet vetoes; and finally, on March 20, 1948, the U.S.S.R. walked out of the Council. Meanwhile, the U. S. and Britain had taken steps to merge their zones economically (Bizone); and on May 31, 1948, the U. S., Britain, France and the Benelux countries agreed to set up a German state comprising the three western zones. At the same time the western powers introduced a new German currency.

The Soviet Union replied to these measures by clamping a blockade on all ground communications between the western zones and Berlin. The western Allies, refusing to be driven out of the capital, immediately organized a gigantic airlift to fly supplies into the beleaguered city. Before the Russians were finally forced to lift the blockade on May 12, 1949, 60,000 men were engaged in the airlift.

In return for lifting the blockade, the U.S.S.R. asked only that the Big Four foreign ministers meet again to discuss German unification. The conference, meeting in Paris from May 23 to June 20, 1949, ended as usual in a deadlock.

The Big Four foreign ministers met once more at Berlin from Jan. 25 to Feb. 18, 1954, again without success.

## German Federal Republic

Area: 94,634 square miles.

Population (est. 1953): 48,994,000 (predominantly German).

Density per square mile: 517.7.

Allied High Commission: James B. Conant (U.S.A.); Sir Frederick H. Millar (United Kingdom); André François-Poncet (France).

President: Theodor Heuss.

Chancellor: Konrad Adenauer.

Principal cities (est. 1953): Hamburg, 1,658,000 (chief port); Munich, 870,000 (Bavarian capital); Cologne, 629,200 (transportation center); Essen, 624,100 (steel center); Frankfurt am Main, 564,400 (manufacturing); Bonn, 130,000 (capital).

Monetary unit: Deutschemark (Dm.).

Language: German.



Religions (census 1950): Protestant 50.7%; Roman Catholic 45.2%; others 4.1%.

The German Federal Republic came into formal existence on Sept. 21, 1949, when the Allied High Commission turned over to it the administration of the U. S., British and French zones of occupation. On May 8, 1949, the constituent assembly at Bonn had approved a Basic Law or constitution for western Germany; it came into force on May 23, after approval by the *Landtage* of the 11 constituent *Länder*. Parliamentary elections were held on Aug. 14; and on Sept. 12, Free Democratic leader Theodor Heuss was elected president of western Germany. On Sept. 15, the *Bundestag* confirmed his appointment of Konrad Adenauer, leader of the Christian Democratic party, as chancellor. His party won a sweeping victory in parliamentary elections held Sept. 6, 1953.

**GOVERNMENT.** Subject to the provisions of the Occupation Statute, the republic and the participating *Länder* acquired full legislative, executive and judicial powers in accordance with the Basic Law and their respective constitutions. The principal powers reserved to the Allied High Commission were those of foreign policy, disarmament and demilitarization, Ruhr control, reparations, decartelization, and security of Allied occupation forces.

The Occupation Statute was amended on March 6, 1951, on the basis of an agreement between the U. S., Britain and France, to provide for creating a German foreign affairs ministry and further progressive relaxation of Allied controls.

Western Germany acquired almost complete self-government subject to Allied defense rights under a peace contract signed May 26, 1952. The contract was subject to ratification by signatory countries, as was an agreement signed May 27 creating within NATO a European defense community with a joint European army to which western Germany would contribute.

The Basic Law or constitution of the republic provides for a federal form of government headed by a president elected every 5 years by a federal convention. The parliament consists of a *Bundestag* whose members are elected every 4 years by popular vote and a *Bundesrat* whose members are appointed by the *Länder* governments. Actual executive power is in the hands of the cabinet, answerable to the *Bundestag* and headed by a chancellor appointed by the president, subject to the right of the *Bundestag* to elect a chancellor of its own preference. Provision was made for the accession of *Länder* in the Soviet zone. Each of the 9 constituent *Länder* must have a republican form of government with an assembly elected by universal suffrage.

The party standing in the *Bundestag* (elections of Sept. 6, 1953) was as follows:

Christian Democrats 244, Social Democrats 151, Free Democrats 48, All-German 27; others 17.

On April 28, 1949, the international Ruhr authority was formally set up to allocate the production of the Ruhr industrial area. Upon the creation, effective July 25, 1952, of the European Coal and Steel Community the authority ceased to function and nearly all restrictions on Ruhr production were removed.

#### SOCIAL AND ECONOMIC CONDITIONS.

**Education.** Education is compulsory between the ages of 6 and 14. In May 1950, there were 28,400 elementary schools with 6,291,000 pupils, 579 higher elementary schools with 196,067 pupils, 1,488 secondary schools with 620,488 students, and 16 universities with 74,258 students.

**Agriculture.** Agriculture is characterized by mixed farming, the climate and the soil permitting cultivation of a variety of crops and most types of livestock. Rye and potatoes are staple crops in the north; grains and sugar beets in the central regions. The northwestern and southern areas are noted for dairying, while the west is the chief fruit- and wine-producing region. The soil is generally poor, and high crop yields are dependent upon large-scale use of fertilizers.

Production data for western Germany (excluding the Saar) are as follows (thousands of metric tons):

	1951	1952*	1953*
Wheat	2,949	3,291	3,180
Rye	3,034	3,119	3,282
Barley	1,688	1,757	2,072
Oats	2,835	2,616	2,554
Potatoes	24,103	23,854	24,535
Sugar beets	7,177	6,550	8,439

\* Provisional.

In Dec. 1952 western Germany (excluding the Saar) had 11,641,000 cattle and 1,360,000 horses and in Dec. 1951, 13,583,000 hogs and 1,666,000 sheep.

Western Germany is not self-sustaining in food. Difficulties stem to a considerable extent from the fact that Poland now controls the area east of the Oder-Neisse, which contained 28 per cent of prewar Germany's arable land and produced about 25 per cent of its food. Moreover, the population has grown rapidly.

**Industry.** Western Germany's industry is well-developed and highly diversified. It accounted for about two-thirds of Germany's prewar industrial production and for a large part of iron and steel production. In March 1954, employment in industry was 15,758,100; there were 1,277,000 unemployed.

Production data for western Germany (monthly averages, in thousands of metric tons) are as follows:

	1951	1952	1953
Pig iron and ferroalloys	891	1,073	971
Crude steel	1,125	1,317	1,285
Cement	1,017	1,074	1,282
Cotton yarn	26.98	24.37	28.60
Wool yarn	7.91	7.46	8.79
Rayon yarn	4.50	3.58	4.33
Automobiles	22.28*	25.09*	30.76*

\* Thousands of units.

Allied restrictions on steel production were lifted following the creation of the European Coal and Steel Community. Production of war material is still prohibited; the ban on production of certain light metals, synthetic rubber, gasoline and oil and machine tools was lifted in April, 1951, subject to capacity limitations in some cases. Industrial production was 158% of the 1936 level in 1953.

*Trade.* Western Germany is dependent upon extraordinary foreign aid to pay for a considerable portion of the food and industrial raw materials which it must import. Recent foreign trade data for the area which now comprises the republic are as follows (in millions of Deutschmarks, including west Berlin):

	1951	1952	1953
Exports	14,534	16,759	18,390
Imports	14,674	16,036	15,848

Leading customers in 1953 were the Netherlands (9%) and France, Belgium, the U. S. and Italy (each 7%). Leading suppliers were the U. S. (10%), the Netherlands (7%), France (7%), Belgium (5%) and Switzerland (5%). Leading exports included machinery and vehicles, coal and coke, and iron and steel and their manufactures.

*Communications.* German railway trackage and rolling stock, as well as the canal system, were largely destroyed during World War II, and the lack of adequate transportation seriously hindered German economic recovery. In Dec. 1951, the western German rail network had a total length of about 19,100 miles, all publicly owned.

Civil air transport is handled by foreign air lines, Germany being prohibited from establishing its own lines. As of July, 1952, the west German merchant fleet had 1,522 vessels (100 tons and over), aggregating 1,397,604 gross tons. The principal seaports of western Germany are Hamburg and Bremen.

Inland waterway transportation is of great importance. Over half the traffic is carried on the Rhine River, which links the Ruhr area with Belgian and Dutch ports. Shipping on the Rhine is controlled by the Central Commission of the Rhine—an international body composed pro-

visionally of U. S., British, French, Swiss, Dutch and Belgian representatives—which was reconvened in October, 1945.

*Finance.* Recent data are as follows (in millions of Deutschmarks):

	1952-53	1953-54*	1954-55*
Revenue	23,102	26,000	27,173
Expenditure	23,096	26,000	27,173

\* Budget estimate.

**NATURAL FEATURES AND RESOURCES; CLIMATE.** The northern plain, the central hill country and the southern mountain district constitute the main physical divisions of western Germany. The Bavarian plateau in the southwest averages 1,600 feet above sea level, but it reaches 9,721 feet in the Zugspitze, the highest point in Germany.

There are several important navigable rivers. In the south the Danube, rising in the Black Forest, flows east across Bavaria into Austria. The other important rivers flow north. The Rhine, which rises in Switzerland and flows across the Netherlands in two channels to the North Sea, is navigable by smaller ocean-going vessels as far as Cologne. The Rhine and the Elbe, which also empties into the North Sea, are navigable within Germany for ships of 400 tons. The Weser, flowing into the North Sea, and the Main and Mosel (Moselle), both tributaries of the Rhine, are also important.

*Minerals and Forests.* Aside from rich deposits of coal and potash, western Germany's mineral wealth is not considerable. The Ruhr, Krefeld and Aachen districts constitute one of the world's greatest coal mining regions, with total reserves estimated at 65,000,000,000 tons. Production in this area is handicapped by the prevalence of thin seams, but distribution is favored by easily accessible natural waterways and efficient canals. Known petroleum resources are meager, and supplies of iron ore, copper, lead and zinc are insufficient for domestic needs. Mineral production (excluding the Saar) was as follows in 1953: coal, 124,475,000 metric tons; lignite, 71,950,000 tons; iron ore, 14,600,000 tons.

About 23 per cent of the total area of western Germany is covered by commercial forests, which yield timber as well as material for paper, wood fiber, cellulose and other products.

*Climate.* The climate of western Germany is intermediate between the oceanic climate of western Europe and the continental climate farther east. The average summer temperature is 60° to 62°. The sheltered mountain valleys of the south enjoy a more temperate climate, especially the valley of the Rhine above Mainz. Rainfall is heaviest in the south and west (over 30 inches).



## German Democratic Republic

Area: 41,700 square miles.  
Population (est. 1953): 18,541,000 (predominantly German).  
Density per square mile: 444.6.  
Soviet High Commissioner: Vladimir Semeonov.

President: Wilhelm Pieck.

Premier: Otto Grotewohl.

Principal cities (est. 1953): Leipzig, 607,-700 (trading, publishing center); Dresden 510,100 (railway center, Elbe port); Karl-Marxstadt (Chemnitz), 298,500 (textiles); Halle am der Saale, 278,400 (railway center); Magdeburg, 252,300 (iron and steel products).

Monetary unit: Ostmark.

**HISTORY AND GOVERNMENT.** The so-called German Democratic Republic comprises the Soviet zone of occupation of eastern Germany. It was proclaimed on Oct. 7, 1949, with its seat at Berlin, on the basis of a constitution adopted May 30, 1949, by a people's congress chosen under a plebiscite arrangement in elections held in the Soviet zone and eastern Berlin on May 15 and 16, 1949. The congress elected a people's council (*Volksrat*) which was transformed on Oct. 7 into a provisional people's chamber (*Volkskammer*). A chamber of the states (*Länderkammer*) was nominated on Oct. 10, and on Oct. 11 both chambers elected Communist-leader Wilhelm Pieck as president of the republic and Otto Grotewohl as minister-president or premier. The constitution is soviet in nature and the government is under complete Communist domination. Soviet government supervision is exercised by the Soviet high commissioner.

The republic lies largely between the Elbe and Oder rivers, including most of Brandenburg, Mecklenburg and the industrial Saxon and Thuringian lands.

**SOCIAL AND ECONOMIC CONDITIONS.** About 22 per cent of the population is engaged in agricultural pursuits and the area is almost self-sufficient in foodstuffs. Postwar yields have, however, suffered from droughts and shortages of fertilizers. The most recent production data available in 1954 were as follows (in thousands of metric tons):

	1948	1949	1950
Wheat	999	926	815
Rye	1,941	2,025	2,130
Oats	809	1,087*	1,140*
Sugar beets	4,126	3,545	5,400
Potatoes	12,408	8,499	11,160†

\* Includes mixed grain. † 1951.

In 1953 there were in the area an estimated 3,800,000 cattle and 8,800,000 hogs and in 1951, 1,087,000 sheep and 718,000 horses.

Most of the industrial establishments, particularly in heavy industry, have been nationalized. The area accounted for 26 per

cent of prewar Germany's industrial production, ranking first in textiles, paper and pulp and ceramics and glass (especially optical glass produced by the famous Jena works). A Two-Year Plan inaugurated in 1949 had the object of raising the volume of production to 81 per cent of the 1936 level by the end of 1950, while a Five-Year Plan initiated in 1951 aimed at doubling the 1936 level by 1955. Unofficial production data for 1952 are as follows: pig iron, 765,000 metric tons; cement, 2,560,000 tons; sulphuric acid, 305,000; raw steel, 1,548,000.

Foreign trade is carried on through government-owned trading companies. Trade is confined largely to Europe. Important imports include foodstuffs, minerals and textiles; exports include machinery, engineering equipment and chemicals.

Railways, highways and inland waterways were reported in 1954 still inadequate to meet the demands of the area's economy. The rehabilitation and expansion of transport facilities was emphasized in connection with the Two- and Five-Year Plans.

The 1953 budget balanced revenue and expenditure at 34,700,000,000 ostmarks.

**NATURAL RESOURCES; CLIMATE.** The area is not rich in minerals. It has only minor deposits of coal (1952 production: 3,300,000 metric tons) and deposits of iron ore are scanty and of low quality (1952: 650,000 tons). It does have important deposits of lignite (1951: 100,000,000 tons) and crude potash (1951: 1,400,000 tons).

Most of the area is part of a low plain. The climate is temperate for the most part but with more difference between summer and winter than in western Germany. Rainfall throughout most of the area varies between 20 and 30 inches annually.

## Berlin

Area: 344 square miles.

Population (census 1950): 3,307,894.

Berlin, the capital of prewar Germany, is surrounded by the German Democratic Republic. It is occupied by the forces of the U. S., the U. K., France and the U.S.S.R., each having its own sector of occupation. The three western sectors contain 55% of the area and 63% of the population.

The supreme authority in western Berlin is exercised by the Allied High Commission; its representatives constitute a tripartite Kommandatura which has responsibility for the exercise of the powers reserved to the occupation forces under the Berlin Charter, a document analogous to the west German Occupation Statute. Other powers of government are exercised by a city assembly elected by popular vote and a *magistrat* (city council) chosen by the assembly.



Supreme authority in the eastern sector of Berlin is exercised by the Soviet high commissioner. Powers not exercised by him or by the German Democratic Republic are vested in a "rump" city government, which proclaimed itself in power Nov. 30, 1948. Major anti-Communist riots broke out in east Berlin in June 1953.

## The Saar

Area: 991 square miles.

Population (est. 1952): 965,000.

Density per square mile: 973.7.

Premier: Johannes Hoffman.

Principal city: Saarbrücken (est. pop. 100,000).

Monetary unit: French franc.

The Saar is an industrial and mining region lying on Germany's western frontier north of Lorraine. Under the Treaty of Versailles it was detached from Germany and placed under the administration of the League of Nations, its coal mines being transferred to France. It voted in Jan., 1935, for reunion with Germany.

Part of the French zone of occupation after World War II, it now has, under agreements with France, legislative, executive and judicial autonomy, subject to the reserved powers of France in foreign relations, defense, and the maintenance of the economic, monetary and customs union between it and France. Under its constitution it has a popularly elected diet of 50 members, to which the cabinet headed by the premier is responsible. There is no head of state as such.

Coal reserves are conservatively estimated at 9,000,000,000 metric tons. Under an agreement concluded with France on Mar. 3, 1950, the mines are under French management with some Saar participation, an annual royalty being paid to the Saar by France. Production in 1953 included 16,416,000 metric tons of coal, 2,688,000 tons of raw steel and 2,288,000 tons of pig iron and ferroalloys.

## Greece (Kingdom)

(Hellas)

Area: 51,182 square miles.\*

Population (estimated 1953): 7,865,000\* (1940, excluding the Dodecanese: Greek, 92.8%; Turkish, 3.8%; Macedonian, 1.3%; Spanish, 1%; others, 1.1%).

Density per square mile: 153.7.\*

Sovereign: King Paul I.

Premier: Alexander Papagos.

Principal cities (census 1951, municipal areas only): Athens (Athenai) 559,250 (capital); Piraeus (Peiralevs) 184,980 (port of Athens); (1940): Salonika (Thessalonike) 216,838 (seaport); Patras (Patrai) 88,414 (seaport); Volos 51,134 (seaport).

Monetary unit: Drachma.

Languages: Greek, Turkish.

Religions: Greek Orthodox, 96%; Mohammedan, 2%; Jewish, 1.1%; others, .9%.

\* Including the Dodecanese.

**HISTORY.** Greece, with a recorded history going back to 776 B.C., reached the peak of its glory in the 5th century B.C., and by the middle of the 2nd century B.C., it had declined to the status of a Roman province. It remained within the Eastern Roman Empire until Constantinople fell to the Crusaders in 1204. In 1453, the Turks took Constantinople, and by 1460 Greece was a Turkish province. The insurrection made famous by the poet Lord Byron broke out in 1821, and in 1827 Greece was set up an independent nation, with sovereignty guaranteed by Britain, France and Russia. Prince Otto of Bavaria was recognized as king five years later, but he was ousted by a revolution in 1862. Prince William of Denmark, as George I, succeeded him.

Up to this time Greece consisted only of the Peloponnesus and the lower part of the peninsula north of the Gulf of Corinth. Britain gave Greece the Ionian Islands in 1864, and Thessaly was added in 1881. Greek success in the Balkan Wars of 1912-13 brought the addition of Macedonia, Epirus, Crete and many Aegean Islands. In World War I, Greece kept a precarious neutrality until June, 1917, when King Constantine (who had succeeded George I in 1913) was forced to abdicate in favor of his second son, Alexander. Greece then entered the war on the Allied side. By the Treaty of Sévres, Greece was awarded Thrace and part of Asia Minor. Turkey, however, drove the Greeks out of Smyrna in 1922.

Greece was proclaimed a republic on March 25, 1924, and there followed strife and dissension between Royalists and Republicans, although fair order was maintained during the premierships of Eleutherios Venizelos from 1928 to 1933.

In 1935, the people voted for the return of King George II, who had abdicated in 1924 after a short rule. In April, 1936, General John Metaxas became premier and by August he had abolished parliament and set up a dictatorship.

Greece was invaded by the Italians in 1940. By April, 1941, the Greeks not only had driven the Italians out of Greece but were well into Albania. The Germans came to Mussolini's rescue, invaded Greece from Bulgaria, and took Athens on April 27, 1941. Starvation and harsh persecution of the Greeks were common during the Axis occupation. After liberation, Greece became a land of conflict with armed bands of Royalists and Communists terrorizing the nation. The government, which had fled the country, returned in Oct., 1944, following Greece's liberation by British forces. Five years of civil war followed, with government troops fighting Communist-led guerrillas, who were aided by neighboring Communist satellites of the U.S.S.R.

The country approved the return of George II by a large majority in a plebi-

scite held Sept. 1, 1946. The king returned on Sept. 28 but died April 1, 1947, and was succeeded by his brother Paul I.

An important postwar development in troubled Greece was the extension of U. S. financial and technical assistance, supervised by a U. S. mission. In May, 1947, the U. S. appropriated \$300,000,000 for Greek aid. Greek forces thus were able to make good progress against the Communist guerrillas, and the cessation of hostilities was announced on Oct. 16, 1949.

Elections held on Nov. 16, 1952, resulted in a sweeping victory for the Greek Rally party, which won 239 out of the 300 seats in the national assembly. Field Marshal Alexander Papagos, its leader, became premier on Nov. 18, 1952.

Greece was admitted to NATO in 1951 and signed a defensive alliance with Turkey and Yugoslavia in 1953.

**GOVERNMENT AND DEFENSE.** Greece is a constitutional hereditary monarchy. Nominal executive power is vested in the king, but the government is administered by a Council of Ministers, headed by the premier, which must enjoy the Assembly's confidence.

Military service is compulsory. U. S. aid in 1948 made possible an increase in army strength from 120,000 to 132,000; the National Guard was also increased from 30,000 to 50,000. Greek forces, which were advised by a U. S. military mission, were demobilized to some extent following the cessation of hostilities with the guerrillas in Oct., 1949. An infantry unit of 1,000 men and several aircraft were dispatched to Korea. In Dec. 1953, the navy had one cruiser, 3 fleet destroyers, 4 submarines and 19 frigates and escort craft.

**SOCIAL AND ECONOMIC CONDITIONS.** Education is compulsory for all children between the ages of 6 and 14. Illiteracy was estimated at 38 per cent in 1940. In 1951-52, there were 8,613 elementary schools, with 921,632 pupils; 314 secondary schools, with 178,098 pupils; and 2 universities (Athens and Salonika), with 6,730 students.

About three-quarters of the population engages in agricultural pursuits, although only one-fifth of the land is arable. Most of the cultivated area is devoted to cereals: wheat (1953: 1,400,000 metric tons), barley (258,000 tons) and maize (334,000 tons). There are also olive trees, vines, tobacco (1952: 42,000 metric tons) and currants. Olive oil production in 1953 was about 174,000 tons. The principal fruits are oranges, lemons, figs, mandarins, apples and pears. At the beginning of 1952, there were 7,651,000 sheep, 798,000 cattle and 590,000 hogs. Wool production in 1952 was 4,000 metric tons (clean basis).

Development of large-scale Greek manufacturing is blocked by lack of coal re-

sources and of capital. The most valuable products are textiles, chemicals and food items. Among other processed or manufactured products are olive oil, wine, spirits, flour, carpets, leather, cigarettes and building materials.

Postwar trade has been financed largely by U. S. aid. Recent figures are as follows (in millions of U. S. dollars):

	1951	1952	1953
Exports	102	120	132
Imports	435	346	294

Chief exports in 1953 were tobacco (38%) and currants and raisins (17%). Leading customers were western Germany (24%), Britain (12%) and the U. S. (12%); leading suppliers, the U. S. (17%), Italy (16%) and western Germany (13%).

The large prewar merchant marine, comprising 589 ships of 1,812,723 tons and 710 sailing vessels of 55,417 tons, played a vital part in the national economy. World War II shipping losses amounted to 1,178,000 tons; the merchant marine on June 30, 1953, totaled 361 ships (100 tons and over) aggregating 1,222,209 gross tons, according to *Lloyd's Register*.

Railway mileage in 1950 totaled 1,665; highway mileage in the same year, 9,600, about 60 per cent of which was in poor condition. Reconstruction of the transport system, financed by U. S. aid, was completed in 1949; it included extensive work on highways, port and dry-dock facilities, railways and bridges.

Recent public finance data are as follows (in billions of drachmas):

	1951-52	1952-53*	1953-54*
Revenue	5,879	7,892	10,320
Expenditure	7,459	8,291	10,320

L \* Budget estimate.

Greek minerals are varied but are exploited only moderately. Principal ones are lignite, iron ore, iron pyrites, magnesite, chromite, lead, bauxite, molybdenum, emery, marine salt and the country's famous marble. A fifth of the country is forested, largely with pine, fir and oak. Resin and turpentine are main forest products. The principal sea product is sponges.

**NATURAL FEATURES AND RESOURCES; CLIMATE.** North central Greece, Epirus and western Macedonia all are mountainous. The main chain of the Pindus Mountains rises to 9,000 feet in places, separating Epirus from the plains of Thessaly. Greek Thrace is mostly a lowland region separated from European Turkey by the lower Maritsa River.

Among the many islands are the Ionian group off the west coast, 742 square miles in area; the Cyclades group to the south-east, 996 square miles; other islands in the eastern Aegean, including Lesbos, Samos and Khios, 1,486 square miles; and Crete,



the fourth largest Mediterranean island, 3,199 square miles. Crete, largely mountainous, is about 160 miles in length, with a width varying from 7 to 35 miles.

The Dodecanese (area 1,035 sq. mi.), a group of 13 islands in the Aegean Sea near the coast of Asia Minor, were ceded to Greece by the 1947 Italian peace treaty and formally transferred on March 7, 1948.

The Greek climate is varied but generally similar to that of other Mediterranean countries. The maritime regions have a temperate climate, with short winters and little snow or frost. In the uplands the winters are long and severe. Precipitation is heaviest in the mountains. Mean temperature at Athens is about 63°, with maximum of 99° in July and minimum of 31.5° in January; annual rainfall there is little more than 15 inches. The summer heat is moderated by sea breezes and cool northerly winds from the mountains.

## Guatemala (Republic)

### (República de Guatemala)

Area: 45,452 square miles.

Population (est. 1953): 3,048,000 (Indian, 60%; white, 5%; mixed and other, 35%).

Density per square mile: 67.1.

President: military junta headed by Col. Carlos Castillo Armas.

Principal cities (census 1950): Guatemala, 284,922 (capital); Quezaltenango, 27,696 (coffee, sugar); Puerto Barrios, 15,332 (port); Mazatenango, 11,032 (coffee).

Monetary unit: Quetzal.

Language: Spanish.

Religion: Roman Catholic.

**HISTORY AND GOVERNMENT.** Once the site of the ancient Mayan civilization, Guatemala was conquered by Spain in 1524 and for the next 300 years was the major center of Spanish government in Central America. Guatemala was one of the founders of the Central American Union in 1823, and in 1839 set itself up as a republic. From 1898 to 1920 the dictator, Manuel Estrada Cabrera, ran the country, and from 1931 to 1944, General Jorge Ubico Castañeda was the "strong man." In July, 1944, the National Assembly elected General Federico Ponce president, but he was overthrown in October, and in December Dr. Juan José Arévalo was elected as the head of a leftist regime which continued to press its reform program in the face of conservative resistance. He took office on March 15, 1945. Jacobo Arbenz Guzmán, administration candidate with pro-Communist leanings, won the Nov., 1950, elections and took office March 15, 1951. He was ousted by anti-Communist forces on June 27, 1954, and a military junta took over.

The Constitution of 1945 provides that a president shall be elected every six years by direct popular vote and cannot succeed

himself immediately. Legislative power is vested in a unicameral National Assembly whose members are popularly elected for four-year terms, half the members being elected every two years. Guatemala has an army of about 8,000, plus 3,000 national police. It also maintains a small air force.

**SOCIAL AND ECONOMIC CONDITIONS.** Education, advanced under Ubico, is free and compulsory. Illiteracy (7 years and over) was 72.2% in 1950. In 1949-50, 3,397 primary schools had 164,816 pupils, while secondary and other schools had 57,708 students. The University of Guatemala is located in Guatemala City.

Most of the ruling class is drawn from the 5 per cent of the population that is white. Spanish is the official language, but at least eighteen Indian dialects are spoken. The Indians are the chief labor supply.

Agriculture engages 90 per cent of Guatemalans. Coffee accounts for a fifth of the cultivated land and a large part of the exports. Recent foreign-trade data are as follows (in millions of quetzales):

	1951	1952	1953
Exports	76.1	87.5	88.9
Imports	80.8	75.7	79.5

In 1953 the U. S. took 78% of the exports and supplied 65% of the imports. Chief exports were coffee (77%) and bananas (14%). Imports included flour, petroleum products, drugs and textiles.

Guatemalan manufacturing is small and local. The country has 600 miles of public railway connecting the coasts, 280 miles of private railway and 4,800 miles of highways. Puerto Barrios, on the Atlantic side, is the main port of entry, and is linked by rail to the capital.

**NATURAL FEATURES AND RESOURCES;** **CLIMATE.** Most of Guatemala is mountainous, with many volcanic peaks. The northern part is the great plain of Petén, largely uncultivated and sparsely populated. The narrow Pacific slope, well watered and fertile, is the most densely populated and the most productive part of Guatemala.

Guatemala has deposits of gold, silver, lead, tin, copper, mercury, coal, antimony, salt, chromite and sulfur, but many of these minerals exist in insufficient quantity to justify exploitation, and only lead and chromite are produced commercially.

The country's vast forests, mostly in the Petén region, yield chicle for chewing gum, cinchona bark, a small amount of rubber, and dyewoods and cabinet woods, such as cedar, mahogany and logwood.

The climate is hot and humid on the coasts, with heavy rainfall (as high as 195 inches), but is temperate in the highlands.



## Haiti (Republic)

(République d'Haiti)

Area: 10,748 square miles.  
Population (est. 1953): 3,315,000 (Negro, 95%; mulatto, 5%).

Density per square mile: 308.4.

President: Paul E. Magloire.

Principal cities (census 1950)\*: Port-au-Prince, 142,840 (capital, chief port); Cap-Haïtien, 24,957 (seaport); Gonaïves, 13,534 (farming district); Les Cayes, 11,835 (seaport; coffee).

Monetary unit: Gourde.

Language: French.

Religion: Roman Catholic.

\* Cities proper, excluding surrounding communes.

**HISTORY.** Haiti, the only Negro republic in the Western hemisphere, occupies the western third of the island of Hispaniola, which was discovered by Columbus in 1492. Its political past is stormy, and today it is the smallest and most thickly populated of the American republics, a nation beset by illiteracy and poverty.

After successive Spanish and French domination, Haiti became a kingdom in 1801 under Toussaint L'Ouverture, a Negro leader. He was later captured by the French and died in prison, but the kingdom lasted and declared its independence in 1804, becoming a republic in 1820. In 1822 Haiti took over all of Hispaniola, and carried on until 1843, when the eastern two-thirds of the island revolted and established the Dominican Republic. Today the island is the only one in the world containing two sovereign nations.

Decades filled with revolution, corruption and disease came to a bloody climax in 1911-15, when Haiti had seven presidents in four years. After the assassination of the last one, United States Marines moved in. By a 1916 treaty, the United States agreed to help administer the country until the Haitians proved themselves capable of orderly self-government. The last Marines left in 1934, but a U. S. fiscal expert continued to supervise customs until 1941. On January 11, 1946, President Elie Lescot was driven from the country by revolution, and a three-man military junta took over until the election of President Dumarsais Estimé on Aug. 16, 1946. He was ousted in 1950 and succeeded after new elections by Paul E. Magloire.

**GOVERNMENT.** Normally the president is elected for six years by two-thirds vote of the National Assembly. That body consists of a 37-member Chamber of Deputies, elected for four years by popular vote; and a 21-member Senate elected for six years. The Garde d'Haiti, about 5,000 strong, serves as army and police force.

**SOCIAL AND ECONOMIC CONDITIONS.** Most Haitians are descended from African slaves. Their illiteracy rate is estimated at 92 per cent. Although 1951 figures showed enrollment of 128,000 in primary and sec-

ondary schools, actual attendance is probably lower. Mulattoes—lightened by the blood of the early French settlers—dominate the political and social life of the nation. Many of them are Paris-educated. While the ruling classes speak pure French, most of the people speak the patois of Creole French, and many of them still practice the strange folk religion of voodoo.

Haiti is predominantly agricultural. Coffee, which makes up more than 30 per cent of Haitian exports, is the principal crop, followed by sisal, sugar cane, cotton, bananas and cacao. Coffee exports in 1952-53 amounted to 23,106 metric tons. Manufacturing is almost entirely for local consumption, but there are several sisal factories and sugar refineries.

Recent trade data are as follows (in millions of gourdes):

	1950-51	1951-52	1952-53
Exports	248.0	264.6	189.0
Imports	222.6	253.5	225.8

Leading exports in 1952-53 were coffee (66%), sisal (13%) and sugar (6%). Leading customers were the U. S. (41%), Belgium (19%) and France (12%); leading suppliers, the U. S. (68%), Canada (5%) and Britain (4%).

In 1951 Haiti had about 2,000 miles of improved road and 180 miles of railway. International air service is provided by PAA and KLM.

Recent public finance data, in millions of gourdes:

	1951-52	1952-53	1953-54*
Revenue	146.3	136.4	129.2
Expenditure	159.4	152.1	129.2

\* Budget estimate.

**NATURAL FEATURES AND RESOURCES; CLIMATE.** Haiti, about the size of Maryland, is two-thirds mountainous, with the rest marked by great valleys, extensive plateaus and small plains. The most densely populated and productive region is the Cul de Sac plain, near Port-au-Prince.

Minerals, relatively unexploited, include gold, silver, iron, copper, antimony, tin, coal, nickel and gypsum. In 1943, a sizable bauxite deposit was found and signed over for U. S. development. Inland Haiti has forests of mahogany, pine, lignum vitae and other commercial woods.

The climate is hot on the coast, temperate in the mountains, with hurricanes frequent in the May-to-October rainy season. Port-au-Prince has a mean annual temperature of 81°. Annual rainfall in Haiti varies from about 20 to 100 inches.

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**Hashemite Kingdom of Jordan. See Jordan**

## Honduras (Republic)

(República de Honduras)

Area: 59,145 square miles.  
Population (est. 1953): 1,557,000  
(mestizo, 86%; Indian, 10%; Negro, 2%;  
white, 2%).

Density per square mile: 26.3.

President: Juan Manuel Gálvez.

Principal cities (census 1950): Tegucigalpa (including twin city of Comayagüela), 72,385 (capital); San Pedro Sula, 21,139 (bananas); La Ceiba, 16,645 (seaport, bananas); Tela, 12,614 (seaport).

Monetary unit: Lempira.

Language: Spanish.

Religion: Roman Catholic.

**HISTORY AND GOVERNMENT.** Columbus discovered Honduras on his last voyage in 1502; it was a Spanish colony and part of Guatemala until 1821, the year of the general Central American revolt against Spain. Honduras declared its independence in 1838, and has been troubled by revolution and war ever since. American Marines intervened in 1903 and 1923. In 1931, 1932 and 1937, major revolutions were crushed by force. The Nicaraguan-Honduras boundary dispute of 1937 almost caused war, and in April, 1945, the country was invaded from Guatemala by a group of Honduran exiles, who were suppressed.

Legislative power is held by the unicameral Congress of Deputies, whose 49 members are popularly elected for six years. The president also is elected for six years and is not supposed to succeed himself.

Military service is compulsory. The army is estimated to be slightly under the 2,500 strength agreed upon by the Central American states.

**SOCIAL AND ECONOMIC CONDITIONS.** Education is free and supposedly compulsory, but less than 25 per cent of the children go to school. The government is trying to reduce illiteracy, estimated at 82 per cent. In 1951, there were 2,061 primary schools with 106,438 students, 21 secondary schools with 1,107 students, and 38 normal and commercial schools with 4,132 students. The National University at Tegucigalpa had 796 students.

Most of the population is of mixed Spanish-Indian blood, but the ruling class is of nearly pure Spanish descent. Except among isolated Indian tribes, Spanish is the common language.

The Honduran economy depends on bananas, which usually account for more than 50 per cent of the nation's exports. The biggest plantations are along the northern coast. Exports in 1951-52 totaled 13,781,286 stems, more than 90 per cent produced by two U. S. companies. Other crops are corn, coffee, rice, henequen, tobacco and coconuts. Honduras also is an important source of sarsaparilla. Cattle

raising and dairy farming flourish on rich pasture lands. Manufacturing is small and local.

Recent foreign trade data are as follows (in millions of lempiras):

	1949-50	1950-51	1951-52
Exports*	43.5	53.7	68.9
Imports	68.3	78.9	109.2

\* Unadjusted for banana undervaluation.

In 1950-51, the U. S. took 73% of the exports (after adjustments for banana undervaluation totaling 101,400,000 lempiras) and supplied 73% of the imports. Leading exports were bananas (64%), coffee (8%) and silver (3%).

Honduras' railroads—920 miles—are almost entirely owned by fruit companies and used to transport bananas; they are confined to the northern coastal area.

**NATURAL FEATURES AND RESOURCES;** CLIMATE. Honduras, in the north central part of Central America, has a 400-mile Caribbean coast-line and a 40-mile Pacific frontage. Generally mountainous, it has fertile plateaus and river valleys and narrow coastal plains.

In 1951-52 Honduras exported 33,875 troy oz. of gold amalgam and 2,702,423 oz. of silver bars; these are the most important mineral products. Copper and iron exist in paying quantity but are undeveloped. The country is noted for rich forest resources, particularly the tropical hardwoods. In 1951-52, 1,373,460 bd. ft. of mahogany lumber and logs and 56,608,285 bd. ft. of pine were exported.

The climate is oppressive in the coastal lowlands, pleasant in the interior highlands. At Tegucigalpa, maximum temperature is about 90° (in May), and minimum 50° (December).

## Hungary (Republic)

Area: 35,893 square miles.

Population (estimated 1952): 9,460,000 (Magyar, German, Slovak).

Density per square mile: 263.6.

Chairman of Presidium: István Dobi.

Prime Minister: Imre Nagy.

Principal cities (census 1948\*): Budapest, 1,058,288 (capital, Danube port); Szeged, 132,688 (textiles, wheat); Debrecen, 119,570 (livestock); Kecskemét, 88,283 (horticulture); Pécs, 77,529 (farming).

Monetary unit: Forint.

Languages (est. 1947): Hungarian 92.9%, German 5.1%, Slovak 0.8%, Serbo-Croat and Slovene 0.6%; others 0.6%.

Religions (est. 1947): Roman Catholic 65.6%, Greek Catholic 2.5%, Calvinist 20.8%, Lutheran 6.0%, Jewish 4.3%, Greek Orthodox 0.4%.

\* Provisional figures.

**HISTORY AND GOVERNMENT.** About two thousand years ago Hungary was part of the Roman provinces of Pannonia and Dacia on the empire's borders. In A.D.



894 it was invaded by the Magyars, who founded a kingdom. Christianity was accepted during the reign of Stephen I (St. Stephen) from 997 to 1083. The peak of Hungary's great period of medieval power came in 1342-82 under King Louis the Great (Louis I) of Anjou, whose dominions touched the Baltic, Black and Mediterranean Seas. When the Turks smashed a Hungarian army in 1526, western and northern Hungary accepted Hapsburg rule to escape Turkish occupation. Transylvania became independent under Hungarian princes. Intermittent war with the Turks was waged thereafter for some years.

After the suppression of the 1848 revolt against Hapsburg rule led by Louis Kossuth, the dual monarchy of Austria-Hungary was set up in 1867.

The dual monarchy was defeated with the other Central Powers in World War I, and the new Hungary underwent hard times. First there was a short-lived Socialist Republic in 1918. The chaotic Communist rule of 1919 under Béla Kun ended with the Rumanians occupying Budapest on Aug. 4, 1919. When the Rumanians left, Admiral Nicholas Horthy entered the capital with a national army. The Treaty of Trianon of June 4, 1920, cost Hungary 75 per cent of its land and more than 50 per cent of its population. Meanwhile, the National Assembly had restored the legal continuity of the old monarchy, and on March 1, 1920, Horthy was elected regent.

After 1920 Hungary was, in effect, ruled by its great land owners, but the turn came in 1932 with the accession of General Julius de Gömbös, a pro-Fascist, as prime minister. Under Gömbös and his successors, Kálmán Darányi in 1936 and Béla Imrédy in 1938, co-operation with Italy and Germany was Hungary's guiding principle. Hungary signed the anti-Comintern pact on Jan. 13, 1939, and the Three Power Pact of Germany, Italy and Japan on Nov. 20, 1940. As inducement and reward for these actions, Hungary got part of Slovakia and all of Ruthenia from Czechoslovakia in 1938 and 1939; and northern Transylvania from Rumania in 1940.

Following the German invasion of Russia on June 22, 1941, Hungary joined the attack against the U.S.S.R., but the war was not popular and Hungarian troops were almost entirely withdrawn from the eastern front by May, 1943. The government of Nicholas von Kállay was overthrown March 19, 1944, and German occupation troops set up a puppet government after Admiral Horthy's appeal for an armistice with advancing Soviet troops had resulted in his overthrow on Oct. 16. The German regime soon fled the capital, however, and on Dec. 23 a provisional government was formed in Soviet-occupied east-

ern Hungary. On Jan. 20, 1945, it signed an armistice in Moscow. On Feb. 1, 1946, the National Assembly approved a constitutional law abolishing the 1,000-year-old monarchy and establishing a republic. Through their control of the police the Communists eventually forced Prime Minister Ferenc Nagy to resign on May 30, 1947, and secured the appointment of a leftwing Smallholder, Lajos Dinnyes, in his place. The Communists emerged as the strongest single party in national elections held Aug. 31, 1947. President Zoltan Tildy resigned July 30, 1948, and was replaced by leftist Árpád Szakasits. István Dobi, also a leftwing Smallholder, replaced Dinnyes on Dec. 10, 1948.

The Communist regime devoted itself to the transformation of Hungary into a people's democracy modeled after the U.S.S.R. Szakasits was replaced by Sándor Rónai on Apr. 26, 1950. Communist leader Matyas Rakosi became prime minister Aug. 15, 1952, and Dobi became chairman of the presidium. Rakosi stepped down in favor of Imre Nagy, another Communist, on July 4, 1953.

The Soviet-type constitution adopted by Parliament on Aug. 18, 1949 declared Hungary to be a "people's republic." The supreme organ of state control was declared to be the Parliament, with deputies elected every 4 years by direct vote. When Parliament is not in session, power is exercised by the presidium headed by a chairman. Executive power is vested in the cabinet headed by the premier.

Only the Communist-controlled, leftwing coalition was represented in the National Assembly after elections held May 15, 1949, in which only one slate of candidates was presented.

**PEACE TREATY OF 1947.** The final peace treaty which took effect Sept. 15, 1947, fixed Hungary's frontiers as they were on Feb. 1, 1938, except that a small bridgehead on the south bank of the Danube opposite Bratislava was ceded to Czechoslovakia. Hungary was to pay reparations of \$300,000,000 over a period of 8 years, \$200,000,000 to the Soviet Union and \$100,000,000 to Yugoslavia and Czechoslovakia. The treaty also provided freedom of navigation on the Danube for nationals of all states.

The strength of Hungarian armed forces was fixed by the treaty as follows: army, 65,000, including frontier, anti-aircraft artillery and river flotilla personnel; air force, 90 planes with a personnel of 5,000. Actual strength of the army in 1952 was estimated at 165,000; security forces, 100,000.

**SOCIAL AND ECONOMIC CONDITIONS.** Education is state-controlled and is compulsory between the ages of 6 and 14. Parochial schools were nationalized in 1948.



Illiteracy (7 years and over) was estimated at 5% in 1949. In 1951-52 there were 6,166 elementary schools with 1,213,000 pupils and 405 secondary schools with 107,900 pupils. The 28 universities and colleges had 40,700 students.

Agriculture is the basis of Hungarian economic life, engaging more than half the population. The Land Reform Act issued in March, 1945, provided for the confiscation of all estates over 1,500 acres; about 8,000,000 acres were divided among some 500,000 families. Cereals grown in the fertile Danubian plains are the chief crops. Leading crops in 1953 were wheat (2,150,000 metric tons), potatoes (2,350,000 tons), barley (700,000 tons), rye (725,000 tons), oats (200,000 tons), malze (2,450,000 tons) and sugar beets.

In addition, cultivation of vines, fruit and garden produce is important; the famous Tokay wine is produced on the southern slopes of the Hegyalja in the northeast. Wine production averages 100,000,000 U. S. gallons annually (1953: 105,700,000 U. S. gallons).

Horse-breeding is a traditionally important branch of agriculture. Hungarians have a great love for horses, and their excellent breeds were exported in large numbers before World War II. Livestock in 1951 included 1,700,000 cattle, 4,500,000 hogs and (1949) 570,000 horses and 650,000 sheep.

The dominant industries are all based on agriculture, with flour milling in first place, followed by sugar refining, brewing and canning. The second group of industries make hardware and machinery. Most of the machine industry is concentrated in Budapest and Győr. Cotton leads the textile industry, especially in Budapest, which is also a center of woolen manufactures. Hemp and flax weaving are important. An estimated 989,000 persons were employed in industry in 1951. Almost all industrial facilities were nationalized under laws passed in 1946, 1948 and 1949. In addition, the Soviet Union took over all German-owned plants as reparations, and in 1946 Soviet-Hungarian companies were formed to exploit bauxite, petroleum, and air and river navigation.

Exports in 1950 were valued at \$257,000,000 and imports at \$256,000,000. Chief destinations of exports were Poland, Czechoslovakia, Rumania and Bulgaria, 36.6%, and the U.S.S.R., 25.7%; chief suppliers, Poland, Czechoslovakia, Rumania and Bulgaria 36.6%, and the U.S.S.R., 22.7%. Leading exports included grain, textiles, live animals and animal products, and machinery.

The focal point in the country's transportation system is the Danube River, navigable for 423 miles in Hungary. The

nation's central location makes it the center of an important transit trade; its pre-war river fleet was the largest on the Danube. Railroad mileage in 1951 totaled 7,100; highway mileage in that year, 15,976.

**NATURAL FEATURES AND RESOURCES;** **CLIMATE.** Most of Hungary is a fertile, rolling plain lying east of the Danube, and drained by the Danube and the Tisza Rivers. In the extreme northwest is the Little Hungarian Plain. South of that area is Lake Balaton, 250 square miles, the largest lake of western and central Europe; to the west of it lies the Bakony Forest.

While Hungary generally is mineral-poor, it has an estimated 250,000,000 tons of bauxite—about 25 per cent of the world's known reserves. Production in 1951 was estimated at 594,000 short tons. The coal is of low quality and is insufficient to meet domestic needs; production in 1952 was estimated at 2,100,000 metric tons and that of lignite at 12,000,000 tons. Other minerals include iron ore, manganese and gold. Petroleum production in 1952 was about 4,500,000 barrels. Uranium is reported to exist in Hungary.

About 12 per cent of Hungary is forested, but the products are of little importance. There are valuable fisheries in Lake Balaton and on the Danube.

Hungary's mean annual temperature ranges from 48° in the north to 52° in the south. Precipitation varies from 30 to 35 inches in the Bakony Forest to less than 15 inches in the east; most of the rain falls in May and June. High summer temperatures and a long autumn are favorable to agriculture.

## Iceland (Republic) (Island)

Area: 39,709 square miles.\*  
Population (est. Dec. 31, 1953): 151,300 (almost entirely Icelandic).  
Density per square mile: 3.8.  
President: Asgeir Asgeirsson.  
Prime Minister: Olafur Thors.  
Principal city (est. 1953): Reykjavik, 60,000 (capital and only large city).  
Monetary unit: Króna.  
Languages: Icelandic, Danish.  
Religion: Evangelical Lutheran.  
\* Including several off-shore islands.

**HISTORY AND GOVERNMENT.** Iceland was first settled shortly before 900, mainly by Norse. A constitution drawn up about 930 created a form of democracy and provided for an Althing, or General Assembly, now the oldest legislative body in the world. In 1262-64, Iceland came under Norwegian-Danish rule. In 1874 Icelanders obtained their own constitution. In 1918 Denmark recognized Iceland as a separate state with unlimited sovereignty, but still

nominally under the Danish king. On June 17, 1944, after a popular referendum, the Althing proclaimed Iceland a completely independent republic.

The British occupied Iceland in 1940, immediately after the German invasion of Denmark. In 1942, the United States took over the burden of protection. Iceland refused to abandon its neutrality in World War II, and thus forfeited charter membership in the United Nations, but it was co-operative with the Allies throughout. Iceland joined the North Atlantic treaty organization in 1949, and in May, 1951, U. S. troops again landed at Iceland's request to aid in its defense preparations.

Constitutionally, the president of Iceland is elected for four years by popular vote. Executive power of the state resides in the prime minister and his cabinet. The Althing is composed of two houses, one with 17 members and the other with 35; each has equal constitutional power.

Iceland has no army or navy.

**SOCIAL AND ECONOMIC CONDITIONS.** Illiteracy is virtually unknown in Iceland. Education is compulsory from 7 to 15, and mobile schools are sent traveling through the sparsely settled areas. When the University of Iceland, established in 1911, needed new buildings in 1935, the government licensed it to conduct a national lottery to raise the funds. The high number of scholarships and the low tuition fees make higher education virtually free.

Iceland publishes more books, newspapers and magazines per capita than any country in the world. Its language, Icelandic, has no dialects and has changed little through the centuries. In addition, Danish is widely understood and spoken. The Evangelical Lutheran Church is state-supported, but there is complete religious freedom.

Approximately six-sevenths of Iceland is unproductive, and only one-fourth of one per cent is under cultivation. With about 30 per cent of the population engaged in farming, sheep raising is the most important branch of this industry. Hay, potatoes and turnips are the principal crops.

Recent trade data are as follows (in millions of krónur):

	1951	1952	1953
Exports	726.6	639.8	706.3
Imports	923.7	911.4	1,111.3

Fish and fish products accounted for 95% of the exports in 1953. Leading customers were the U.S. (15%), U.S.S.R. (13%) and Britain (11%); leading suppliers, the U.S. (27%), Britain (11%) and the Netherlands Antilles (10%).

Iceland has no railways. Highways total about 4,450 miles. In Oct. 1953 the merchant marine had 550 vessels (12 tons and over), aggregating 98,659 gross tons.

**NATURAL FEATURES AND RESOURCES;** CLIMATE. Iceland, a bleak, volcanic island about the size of Kentucky, has maximum dimensions of 298 by 194 miles; it is mostly tableland, high, rugged and barren. It is one of the world's most volcanic regions.

Small fresh-water lakes are found throughout the island, and there are many natural oddities, including hot springs, geysers, sulfur beds, canyons, waterfalls and swift rivers. More than 13 per cent of the area is covered by snowfields and glaciers, and most of the people live in the 7 per cent of the island comprising fertile coastlands. Vegetation is of the Arctic type, mostly stunted. Except for peat and fisheries, Iceland has no natural resources.

About one-sixth of the people are engaged in fishing, and fish and fish products make up the bulk of Iceland's exports. The annual catch averages approximately 350,000 metric tons (1953: 362,670 tons). Many European fishing craft visit Iceland's fisheries, which lead the world in cod and are important for herring, plaice and halibut.

The Gulf Stream modifies Iceland's climate to make it much like that of southern Canada, though with longer winters and shorter summers. The mean annual temperature at Reykjavik is 39.4°, with January the coldest month (34.2°) and July the warmest (51.6°). Rainfall varies from about 12 inches annually to 85.

## Indonesia (Republic)

### (Republik Indonesia)

**Area:** 583,479 square miles.\*

**Population** (est. Feb. 1954): 78,389,000 (Indonesian, except for an estimated 1,500,000 Chinese and 100,000 Europeans in 1951).

**Density** per square mile: 134.3.

**President:** Achmed Sukarno.

**Premier:** Ali Sastroamidjojo.

**Principal cities** (est. 1951): Jakarta (Batavia), 2,800,000 (capital); Jokjakarta, 1,848,886 (former Republican capital); Surabaya, 714,898 (seaport, naval base); Bandung, 659,213 (commercial center, west Java); Semarang, 310,942 (seaport, central Java); Surakarta, 266,365 (sugar, tobacco).

**Monetary unit:** Rupiah.

**Languages:** Bahasa Indonesia (Malay) (official), Dutch, Javanese, Sundanese, Madurese.

**Religions:** Mohammedan (predominant), Christian (about 2,500,000), Brahmin, Buddhist.

\* Excluding Netherlands New Guinea.

**HISTORY.** The sovereign state of Indonesia, a group of islands with a total area more than twice that of Texas, constitutes one of the world's richest natural areas. These islands—Sumatra, Java, Madura, central and southern Borneo, Celebes and the Moluccas—would reach from San Francisco to Honolulu if their extent was transposed to the eastern Pacific. They have great



wealth in tin, rubber, spices, oil, quinine and copra.

During the first few centuries of the Christian era, most of the islands came under the influence of Hindu priests and traders who spread their culture and religion. Moslem invasions began in the 13th century, and most of the area was Moslem by the 15th century. Portuguese traders arrived early in the 16th century but were ousted by the Dutch about 1595. After Napoleon subjugated the Netherlands homeland in 1811, the British seized the islands but returned them to the Dutch in 1816. In 1922 the islands were made an integral part of the Netherlands kingdom.

In World War II, the Japanese military occupation with nominal native self-government continued until Aug., 1945, except in outlying parts of New Guinea and Borneo. About the time of the Japanese surrender, a self-styled Indonesian Republic headed by Achmed Sukarno sprang up and took over effective control of parts of Sumatra and Java. Allied forces, mostly British Indian troops, moved in, and fighting between them and the nationalists continued until Nov. 15, 1946, when Dutch-native negotiations resulted in a draft agreement initialed at Linggadjati, near Cheribon. The agreement was formally signed by Dutch and Indonesian authorities on March 25, 1947.

This agreement contemplated the formation by Jan. 1, 1949, of a Netherlands-Indonesian Union, consisting on the one hand of the Netherlands, the Netherlands Antilles and Surinam and on the other of the United States of Indonesia, which was to be a sovereign nation composed of three equal states—the Republic of Indonesia, East Indonesia and Borneo. Differences of interpretation ensued, and the Dutch resorted to force on July 20, 1947. Both sides issued cease-fire orders on Aug. 4, 1947, in response to a call from the U. N. Security Council.

The U. N. named a Good Offices Commission under whose auspices the Dutch and the Republic signed another truce on Jan. 17, 1948, aboard the U.S.S. *Renville*. A provisional federal government for the whole area was installed on Mar. 9, 1948, but difficulties between the Dutch and the Republic continued. On Dec. 18, 1948, Dutch forces instituted "police" action against Republican areas and seized the Republican leaders. Hostilities ceased Jan. 1, 1949, following U. N. intervention. On May 7, the Dutch agreed to return the exiled Republican regime to central Java.

On Nov. 2, 1949, Dutch and Indonesian leaders agreed upon the terms of union between the Netherlands and Indonesia. Dr. Sukarno was elected president of the federation on Dec. 16 by representatives of the

Indonesian states, and the first all-Indonesian cabinet was formed with Mohammed Hatta as premier. The transfer of sovereignty took place at Amsterdam on Dec. 27, 1949.

The principle of federalism was discarded on Aug. 4, 1950, and Indonesia became a unitary state. The attaining of independence was followed by repeated financial, economic and political crises and many short-lived, weak cabinets; the holding of parliamentary elections was repeatedly postponed. Relations with the Netherlands were strained by a dispute over the status of Netherlands New Guinea and proposals for the termination of the union.

**GOVERNMENT AND DEFENSE.** Under the statute of union between the Netherlands and Indonesia, both are sovereign independent nations joined together in the person of the Queen of the Netherlands. The statute provides for economic, financial and military cooperation.

Indonesia is a republic of 10 provinces under the constitution promulgated on Aug. 15, 1950. Legislative power is vested in the 215-member People's Representative Council, composed of members of the former Federal and Republican parliaments. Executive power is exercised by the president and the premier and his cabinet.

Military service is not compulsory. The army is to be stabilized at 300,000 men. The navy (1953) had 1 destroyer, 4 corvettes, 6 patrol ships and many smaller craft. The air force was composed of 25 aircraft.

**SOCIAL AND ECONOMIC CONDITIONS.** School attendance is not compulsory. Illiteracy was officially estimated at 47% in 1952. In 1952-53 there were 27,342 elementary schools with 6,129,152 pupils and 1,334 secondary schools with 218,863 pupils. The two universities—Gadjah Mada at Jokjakarta and the University of Indonesia at Jakarta—had 11,805 students.

The islands of Java and Madura, with only nine per cent of the area, have more than two-thirds of the population, and are among the most densely settled areas in the world (more than 800 per sq. mi.). The natives, including about 137 races and tribes, are mainly of Malayan stock, with the Javanese the most advanced.

Agriculture engages about 70 per cent of the adult males. Rich in a variety of crops, the islands prior to World War II produced about 31 per cent of the world's copra, 37 per cent of its rubber, 83 per cent of its pepper, and nearly all of its quinine. The big-estate agriculture on Java and Sumatra is devoted mainly to export. The rest is subsistence agriculture. Rice is the staple food and chief crop; production in 1953 was 14,162,230 metric tons (paddy). Major plantation crops, with 1953 production in metric tons, are rubber, 699,345;



tea, 36,778; coffee, 21,847; cinchona bark, 1,115; palm oil, 160,569; palm kernels, 42,-377.

Others are sugar, cacao, spices, agava fiber, copra and kapok. In addition to rice, the chief food crops are maize, cassava, sweet potatoes, peanuts and soybeans.

In 1951 there were an estimated 4,230,-000 cattle, 2,008,000 sheep, 1,198,000 hogs, 2,600,000 buffalo and 508,000 horses.

Industry, especially in Java, developed rapidly after 1930. In addition to industries connected with the processing of the rich natural products, there were established chemical works, textile and paper mills, soap factories, breweries, shipyards, a Goodyear tire and rubber plant and a General Motors assembly plant. War damage was severe.

Indonesia is primarily an importer of consumer and capital goods and an exporter of mineral and plantation products. Recent trade data are as follows (in millions of rupiahs):

	1951	1952*†	1953*†
Exports	4,676	10,387	9,344
Imports	3,060	10,533	8,584

\* Preliminary. † Rupiah devalued Feb. 4, 1952.

Chief exports in 1953 were rubber (33%), petroleum and products (25%), tin (10%), copra (8%) and tea (3%). Leading customers were the Netherlands (23%), Singapore (22%), the U. S. (21%) and Britain (2%); leading suppliers, the U. S. (18%), Japan (17%), the Netherlands (12%) and Britain (7%).

The highway network totaled about 40,300 mi. in 1951; in 1952 there were about 4,215 miles of railway, of which about three-fourths were in Java and a fourth in Sumatra.

Recent financial data are as follows (in millions of rupiahs):

	1951*	1952†	1953†
Revenue	11,824.4	13,235.9	11,422.1
Expenditure	10,921.8	17,562.9	13,216.1

\* Provisional. † Budget estimate.

The public debt was reported provisionally at 6,769,000,000 rupiahs on Dec. 31, 1952.

**NATURAL FEATURES AND RESOURCES;** CLIMATE. A backbone of high mountain ranges with many snow-capped peaks extends throughout the main islands of the archipelago. Earthquakes are frequent, and there are many active volcanoes, 90 of them in Sumatra. Borneo is heavily forested.

Petroleum is the principal mineral product of modern Indonesia. The fields, in Sumatra, east Borneo and east Java, produced 10,225,321 metric tons (about 73,-600,000 barrels) in 1953 and exceeded pre-World War II production for the second straight year.

The tin industry attained prewar levels more rapidly than others after World War II; production in 1953 was 33,753 long tons. Other important minerals include bauxite (1953: 149,552 metric tons) coal (900,000 tons), salt, nickel and manganese. Deposits of uranium are reported.

Forests, covering much of the area except Java, yield such products as timber, rattan, bamboo, gum, wild rubber, gutta-percha and quinine. Most valuable timber is teak, found mostly in east Java. Ebony, sandalwood and ironwood also are cut.

The climate throughout the group is equatorial and monsoonal, with little variation of temperature (yearly average about 80°; at Batavia, 79°) and rainfall averaging over 100 inches a year. In Sumatra and Java the hot and rainy season usually lasts from May to October; December and January are relatively cool and dry; February, March and April, hot and dry.

## Iran (Kingdom)

Area: 634,413 square miles.

Population (est. 1951)\*: 20,000,000 (Iranian, Kurdish, Azerbaijani).

Density per square mile: 31.5.

Ruler: Mohammed Riza Pahlavi.

Prime Minister: Fazollah Zahedi.

Principal cities (est. 1948): Teheran, 850,000 (capital); Meshed, 250,000 (Moslem shrine); Tabriz, 214,000 (capital, Azerbaijani); Isfahan, 205,000 (cotton, tobacco); Abadan, 150,000 (petroleum).

Monetary unit: Rial.

Languages: Iranian (Persian), Kurdish, Azerbaijani.

Religions: Moslem (Shiah), about 90%; Moslem (Sunnii), about 5%; Armenian; Jewish; Nestorian; Parsi.

\* U.N. estimate; no census ever taken.

**HISTORY.** Oil-rich Iran, roughly one-fifth the size of the United States, was called Persia before 1935. Its key location blocks the lower land gate to Asia, and also stands in the way of traditional Russian ambitions for access to the Indian Ocean. In modern times, Iran has drawn Big Power interest because of its rich oil deposits.

Iran's history is a long one of rising and falling dynasties. After periods of Assyrian, Median and Achaemenidian rule, Persia became a powerful empire under Cyrus the Great, reaching from the Indus to the Nile at its zenith in 525 B.C. It fell to Alexander in 331-30 B.C., to the Selucidae in 312-02 B.C., and to the Parthians about 130 B.C. A native Persian regime arose about A.D. 224, was weakened fighting the Turks, and fell to the Arabs in 637. In the 12th century the Mongols took their turn ruling Persia, and in the early 18th century the Turks and Russians occupied it. In modern times, Russia, Turkey, Britain, France, and, most recently, the United States, all have taken keen competitive interest in Iran.

An Anglo-Russian convention of 1907 divided Iran into two spheres of influence. British attempts to impose a protectorate over all of Iran were defeated in 1919. On Feb. 26, 1921, General Riza Pahlavi seized the government and was elected hereditary shah in 1925. Subsequently he did much to modernize the country, and abolished all foreign extraterritorial rights.

Increased pro-Axis activity led to Anglo-Russian occupation of Iran in August, 1941, and deposition of the shah in favor of his son, Mohammed Riza Pahlavi.

In November, 1945, a Soviet-inspired autonomist movement won control of Azerbaijan, Iran's northwest province. To protect their advantage, the Russians kept troops in that area past the treaty evacuation date of March 2, 1946. The Iranians promptly protested this breach of agreement to the United Nations. The Russians evacuated their troops on May 6 but not before they had forced Iran to promise them oil concessions in the north.

Ali Razmara became premier June 26, 1950, and pledged to restore efficient and honest government, but he was assassinated Mar. 7, 1951. Mohammed Mossadegh took over April 29. The next day, parliament completed action on a bill nationalizing the oil industry. The action was taken over strong British protests, but Britain evacuated the oil refineries Oct. 3, 1951. Subsequent British-Iranian negotiations failed. Loss of oil revenue placed Iran in a precarious economic position.

Mossadegh was ousted Aug. 19, 1953, in a *coup d'état* led by Fazollah Zahedi, whom the Shah had named premier.

Under the terms of an agreement announced Aug. 5, 1954, a consortium of 8 western oil companies is to produce and market Iran's oil.

**GOVERNMENT AND DEFENSE.** Iran is a constitutional monarchy, and the shah has the usual powers of the head of a parliamentary state. Executive power is exercised by a cabinet headed by the prime minister, who is appointed by the shah and is responsible to the Majlis (parliament), the lower house of which has 136 popularly-elected members.

In May, 1949, the constitution was amended to permit the shah to dissolve the Majlis; at the same time legislation was enacted to set up an upper house or Senate provided by the 1906 constitution but never established.

Military service is compulsory; the initial training period is 2 years. The army, modernized and reorganized by Riza Pahlavi, father of the present shah, consists of about 130,000 men. The air force has several hundred planes, and the navy several small craft in the Persian Gulf. There is also a U. S.-trained police force of 20,000.

**SOCIAL AND ECONOMIC CONDITIONS.** Education has made good progress in the 20th century, supplanting the old and essentially religious system. In 1950 there were 9,900 primary and nursery schools with 762,908 pupils and 333 secondary schools with 51,039. There are universities at Teheran and Tabriz. Illiteracy is high.

Iran is predominantly agricultural. Large estates are numerous, and irrigation is common, especially on the central plateau. The principal crops are wheat (est. 1952: 2,682,000 metric tons) and barley (1,048,000 tons). Rice production, confined largely to the Caspian provinces, was estimated at 500,000 tons (paddy) in 1953.

Other crops include grapes, dates, apricots, tobacco, tea, cotton, sugar beets and corn. There are extensive grazing lands. Wool production in 1952 was estimated at 9,000 metric tons (clean); in 1951 there were an estimated 18,000,000 sheep.

Iran must still import many manufactured necessities, but several new factories were established by the government after 1925, including sugar plants, rice and oil mills, textile factories, a cement factory, copper smelter, glycerine factory and small arms factory. The Chalus silk mill produces 1,000,000 yards or more a year. Both sugar and tobacco are government monopolies. The manufacture of carpets, for which Iran is famous, is a valuable industry.

Foreign-trade data (trade years beginning March 21) in billions of rials:

	1950-51	1951-52	1952-53
Exports	25.75	11.27	5.88
Imports	6.98	7.37	5.20

The chief exports in 1952-53 were cotton (17%) and rugs (16%). Leading customers were Germany (18%), other continental European Payments Union countries (17%) and the U. S. and Canada (11%); leading suppliers, the U. S. and Canada (22%), Germany (15%) and other continental EPU countries (14%).

Motorable roads in 1949 totaled some 17,000 miles, about one-fifth asphalted. Railway mileage was 1,748 (1949).

The budget for 1951-52 forecast revenue of 9,552,846,499 rials and expenditure of 9,549,595,000 rials. The internal debt in Dec. 1951 was 7,360,000,000 rials.

**NATURAL FEATURES AND RESOURCES; CLIMATE.** Iran is, in general, a plateau averaging 4,000 feet elevation. In addition, there are maritime lowlands along the Persian Gulf and the Caspian Sea. The Elburz Mountains in the north rise to 18,603 feet at Mt. Demavend. From northwest to southeast, the country is crossed by a desert 800 miles long.

Considerable mineral wealth exists, but only oil is exploited commercially. The principal field, near Shushar in the south-



west, was worked until 1951 by the Anglo-Iranian Oil Company. The latter's concession began in 1901 and was to run until 1993, but its properties were nationalized by the Iranian government in April, 1951. Production in 1950 was 31,750,000 long tons (about 240,000,000 barrels). The refinery at Abadan processed 24,855,171 tons. Production under Iranian government control was only a small fraction of normal. Deposits of uranium have been reported.

The main forest belt on the northern Elburz slope supplies railroad ties, charcoal and firewood. Gums are the most valuable forest product. Fisheries are worked in the Persian Gulf and the Caspian Sea.

The central plateau is hot in summer and very cold in winter, but the Caspian area has a sub-tropical climate. Mean temperatures vary at Teheran from 35° in January to 85° in July (yearly average 62°); at Bushire, on the Persian Gulf, from 58° in January to 90° in July and August (average 75°). Rainfall is light and variable (4 to 20 inches or more annually at Teheran).

## Iraq (Kingdom)

Area: 116,600 square miles.\*

Population (est. 1950): 5,100,000 (Arab, 75%; Kurdish, 15%; Iranian, 3.75%; others, 6.25%).

Density per square mile: 43.7.

Ruler: King Faisal II.

Prime Minister: Fadil Al-Jamali.

Principal cities (census 1947, cities proper): Baghdad, 364,049 (capital); Mosul, 203,273 (oil); Karbala, 122,719 (religious center); Basra, 94,000 (chief port).

Monetary unit: Dinar.

Languages: Arabic, Kurdish.

Religions: Moslem (Shiah), 53%; Moslem (Sunnī), 35%; Christian, 2.8%; Jewish, 2.5%; others, 6.7%.

\* Excluding southern and western desert areas.

**HISTORY.** Iraq, a triangle of mountains, desert and fertile river valley less than half the size of Texas, is bounded east by Iran, north by Turkey, west by Syria and Jordan, and south by Saudi Arabia. From earliest times it has been known as Mesopotamia—the land between the rivers—for it embraces a large part of the alluvial plains of the Tigris and Euphrates.

An advanced civilization existed in Mesopotamia by 4000 B.C. Sometime after 2000 B.C. it became the center of the ancient Babylonian and Assyrian empires. It was conquered by Cyrus the Great of Persia in 538 B.C., and by Alexander in 331 B.C. After an Arab conquest in A.D. 637–40, Baghdad became capital of the ruling caliphate. The country was cruelly pillaged by the Mongols in 1258, and during the 16th, 17th and 18th centuries was the object of repeated Turkish-Persian competition.

Nominal Turkish suzerainty imposed in

1638 was replaced by direct Turkish rule in 1831. In World War I an Anglo-Indian force occupied most of the country, and Britain was given a mandate over the area in 1920. The British recognized Iraq as a kingdom in 1922 and terminated the mandate in 1932, when Iraq was admitted to the League of Nations. In World War II, Iraq generally adhered to its 1930 treaty of alliance with Britain, but in 1941 British troops were compelled to put down a pro-Axis revolt led by Prime Minister Rashid Ali. Iraq became a charter member of the Arab League in March, 1945 and Iraqi troops took part in the Arab invasion of Palestine in May, 1948.

King Faisal II, born on May 2, 1935, succeeded his father, Ghazi I, who was killed in an automobile accident on April 4, 1939. The king's uncle, Abdul-Ilah, is heir apparent.

**GOVERNMENT AND DEFENSE.** Under the 1924–25 constitution, Iraq is a hereditary monarchy with a two-house Parliament. The Senate is named by the king for a term of eight years; the 138-member Chamber of Deputies is elected popularly for four years. Executive power is vested in a Council of Ministers, headed by the prime minister, who is appointed by the king.

Military service is compulsory, with an initial training period of 1½ to 2 years. The British-trained police number about 21,000. The 1930 treaty gives Britain the provisional right to keep troops in Iraq.

**SOCIAL AND ECONOMIC CONDITIONS.** Primary education is free and nominally compulsory. Secondary education is neither free nor compulsory. There are no universities. In 1950–51 there were 1,229 elementary schools with 203,106 pupils and 216 intermediate and secondary schools with 32,443 pupils. Ten institutions of higher learning had a combined enrollment of 5,000 students.

The chief economic activity is agriculture, dependent upon irrigation and confined to the valleys of the Tigris and Euphrates. Iraq supplies about 80 per cent of the world's dates (1953: 315,000 metric tons). Chief among the cereal products of Iraq are barley (1953: 975,000 metric tons), wheat (720,000 tons), rice, sorghum, maize and millet. Many fruits and some tobacco and cotton are grown. Grazing is the principal occupation of the many nomadic and seminomadic tribes. Livestock estimates included (1951) 8,520,000 sheep, (1950) 1,062,000 cattle, (1949) 2,000,000 goats and 291,000 camels. Wool production in 1953 was about 9,700 metric tons (clean basis).

Industry is still embryonic. Of some 100 firms, the most important are those making brick, tile, woolen textiles, vegetable oils, soap, glass and cigarettes.



Recent foreign-trade data are as follows (in millions of dinars):

	1951	1952	1953
Exports	66.1*	102.9*	145.4*
Imports	51.0	61.8	68.7

\* Adjusted to include estimated value of crude petroleum exports.

Chief exports in 1953 were petroleum (86%), barley (6%) and dates (3%). Leading suppliers in 1952 were Britain (38%), the U. S. (18%) and Italy (5%); leading customers (excluding petroleum) were Britain (36%), Japan (13%) and Saudi Arabia (8%).

The only port for seagoing vessels is that of Basra, located on the Shatt al-'Arab River near the head of the Persian Gulf. There are about 4,000 miles of improved and unimproved roads. Iraq State Railways, the only rail line, operates three lines totaling 1,555 miles.

**NATURAL FEATURES AND RESOURCES;** **CLIMATE.** Iraq has arid desertland west of the Euphrates, a broad central valley between the Euphrates and Tigris, and mountains in the northeast. The fertile lower valley is formed by the delta of the two rivers, which join about 120 miles from the head of the Persian Gulf. The gulf coast line is 26 miles.

Oil production is concentrated at the Baba Gurgur fields near Kirkuk, which are operated on behalf of an international group by the British-managed Iraq Petroleum Company (production 1953: 22,865,538 long tons). Associated companies operate fields at Zubair near Basra (1953: 3,077,522 tons) and at Ain Zalah (1953: 1,277,139 tons). Oil is piped to Tripoli in Lebanon, Baniyas in Syria, Fao on the Persian Gulf and Haifa in Israel (suspended in 1948). The Khanaqin Oil Company, an Anglo-Iranian subsidiary, operates another field which produces only for local consumption (1953: 520,000 long tons).

Iraq's climate, generally, runs to great extremes—long hot summers and short cold winters. The area on the Persian Gulf is one of the hottest places in the world. Average temperature at Baghdad is 49° in January and 92° in July and August. Rainfall there is only about 7 inches annually.

## Ireland (Republic)

Area: 26,601 square miles (not including larger water bodies).

Population (est. June 30, 1953): 2,942,000 (almost entirely Irish).

Density per square mile: 110.6.

President: Séan T. O'Kelly.

Prime Minister: John A. Costello.

Principal cities (census 1951): Dublin (Baile Átha Cliath), 522,183 (capital); Cork, 74,567 (seaport); Limerick (Luim-

neach), 50,820 (seaport); Dun Laoghaire (Kingstown), 47,920 (seaport).

Monetary unit: Irish pound.

Languages: Gaelic, English.

Religions (census 1946): Roman Catholic, 94.3%; Protestant Episcopal, 4.2%; Presbyterian, .8%; others, .7%.

**HISTORY.** About the beginning of the Christian era, Ireland was divided into five kingdoms, each with its own ruler, but each subject to the overlord of all Ireland who dwelt at Tara. St. Patrick introduced Christianity in A.D. 432.

Norse depredations along the coasts, starting in 795, ended in 1014 with Norse defeat at the Battle of Clontarf by forces under Brian. In the middle of the 12th century, the Pope gave all Ireland to the English crown as a papal fief. In 1171 Henry II of England was acknowledged "Lord of Ireland," but native sectional rule continued for centuries, and English control over the whole island was not reasonably absolute until the 17th century. By the Act of Union (1800), England and Ireland became the "United Kingdom of Great Britain and Ireland."

The great potato famine of 1846-48 took many lives and drove millions to emigrate to America.

Several home-rule bills were introduced in the English Parliament in the 19th century, but failed of passage. One was finally approved in 1914, but enforcement was suspended by the outbreak of World War I. During the war, agitation for freedom was carried on by the nationalist party—Sinn Féin (Ourselves). In 1916 the British quickly suppressed the famous Easter Week rebellion and executed its leaders.

After the 1918 elections, seventy-three of the Sinn Féiners elected to the English Parliament met in Dublin, proclaimed themselves an Irish Parliament, and passed a declaration of independence. The result was war between Irish nationalists and British troops from January, 1919, to May, 1921. A treaty ratified in December, 1921, gave Ireland political status equal to that of Canada. Six Ulster counties, largely Protestant, formed a separate government as Northern Ireland, closely bound to England; the other twenty-six became the Irish Free State. Republican extremists, headed by Éamon de Valera, refused for several years to recognize the treaty.

William Cosgrave, leader of the Sinn Féin's right wing, was president from 1922 to 1932. In the latter year, De Valera's party, Fianna Fáil, won control of the government. Under De Valera's leadership a new constitution was adopted in 1937 making the nation, in effect, a republic. The country's former name of "Eire" was restored by the constitution.

Dr. Douglas Hyde, elected without opposition as Eire's first president in 1938, was succeeded in 1945 by Séan T. O'Kelly, the Fianna Fáil nominee (re-elected in 1952). The country maintained strict neutrality during World War II.

De Valera's long tenure as prime minister came to an end in Feb., 1948, when the Fianna Fáil lost its absolute majority in the parliamentary elections. John A. Costello, a Fine Gael moderate, took office at the head of a six-party coalition cabinet on Feb. 18, 1948. He yielded to De Valera on June 18, 1951, after new elections but again took office on June 2, 1954.

The nation severed its last ties with the British Crown at midnight April 17, 1949, and officially proclaimed itself the Republic of Ireland on the next day—Easter Monday.

**GOVERNMENT AND DEFENSE.** Ireland is a sovereign, independent republic. The president, directly elected for seven years, names the prime minister on the nomination of the Chamber of Deputies. Parliament (Oireachtas) has two houses. The Chamber of Deputies (Dáil Éireann) has 147 members elected by proportional representation for a five-year term. The Senate (Seanad Éireann) has 60 members, of whom 11 are named by the prime minister, 6 by the universities, and 43 from vocational panels; its powers are limited.

Party representation in the Dáil Éireann after elections of May 18, 1954, was as follows: Fianna Fáil, 65; Fine Gael, 50; Labour, 19; Farmers, 5; Clann Na Poblachta, 3; independents, 5.

Military service is voluntary. The army has a permanent authorized strength of 12,500. In 1938 Britain gave up its last defense posts in the republic, including those at Cobh, Berehaven and Lough Swilly.

**SOCIAL AND ECONOMIC CONDITIONS.** Elementary education is free and is provided in state schools; secondary education is under private control, notably the religious orders. Technical and agricultural education is under local control, aided by state subsidies. Illiteracy is negligible. The 4,876 elementary schools had 460,845 pupils in 1951-52; 434 secondary schools had 50,179 pupils. The University of Dublin (Trinity College), founded in 1591, had an enrollment of 2,230 in 1951-52, and the National University of Ireland (constituent colleges at Cork, Galway, Dublin and Maynooth) had 5,469.

The majority of the people are English-speaking, although the government has attempted to promote the traditional Gaelic language, which is an essential part of the curriculum for all state schools.

Ireland is predominantly an agricultural country, with about 70 per cent of the total land area (17,000,000 acres) devoted

to crops and pasture. The pastoral industry is the basis of the nation's economy, but recent years have brought a greater diversity in agriculture, marked by large increases in sugar beet and wheat production. Principal crops in 1953 were wheat, 411,000 long tons; rye, 3,000 tons; oats, 567,000 tons; potatoes, 2,717,000 tons; sugar beets, 822,000 tons; and flax, 1,000 tons. Other staple crops are turnips, cabbage and hay. Livestock in June 1953 included 4,396,709 cattle, 2,930,326 sheep and 881,867 hogs. Wool output in 1953 was 15,200,200 lbs. (greasy); butter output, 1,066,325 cwt.

Leading manufactures are ordinarily beverages, tobacco, wood, paper, clothing, textiles and metals. The hydroelectric plant erected on the Shannon River in County Limerick provides cheap electricity for homes and factories.

Trade statistics are as follows (in millions of Irish pounds):

	1951	1952	1953
Exports	81.5	101.6	114.0
Imports	204.6	172.3	183.4

The leading customer in 1953 was Great Britain (76%), followed by Northern Ireland (15%) and the U. S. (2%). Britain was also the chief supplier (50%), followed by the U. S. (9%) and the Netherlands (5%). Major exports were cattle (22%), chocolate crumb and confectionery (13%), beef and veal (5%) and drink (5%). Major imports were textiles, machinery, vehicles, coal, wheat, chemicals and iron and steel and manufactures.

Railway mileage is about 2,500. Main roads in 1952 totaled 50,002 miles. Shannon is an important international airport. There are 670 miles of canals and navigable waterways.

Recent finance data are as follows (in millions of Irish pounds):

	1952-53	1953-54	1954-55*
Revenue	95.9	102.8	105.7
Expenditure	98.0	102.5	105.6

\* Budget estimate.

The public debt on March 31, 1954, was £279,000,000; state assets were £169,000,000. **NATURAL FEATURES AND RESOURCES;** **CLIMATE.** Occupying the entire island except for the six northern counties of Ulster, Ireland resembles a basin—a central plain rimmed with mountains, except in the Dublin region. The mountains are low, with the highest peak, Carratuohill in Kerry County, rising 3,415 feet.

The principal river is the Shannon, which begins in the north central area, flows south and southwest for about 240 miles and empties into the Atlantic. About 20 per cent of the country is covered by bogs. Among the many lakes are the



famous Lakes of Killarney in the south-west county of Kerry.

In 1953, Ireland mined 183,600 metric tons of coal, some gypsum, and considerable peat from its bogs, but otherwise the mineral resources are negligible, as are those of the forests. The fishing industry employs about 10,000 men. The 1953 wetfish catch, including mackerel, herring, whiting, cod and plaice, totaled 200,329 cwt. valued at £526,107.

A moist and mild climate, with annual rainfall running between thirty and forty inches fairly evenly distributed throughout the year, is influenced by the Gulf Stream, which makes the winters warmer than in other places in the same latitude. The mean temperature at Dublin is 41.7° in January and 60.5° in July.

## Israel (Republic)

Area: 8,050 square miles.  
Population (est. Dec. 31, 1953): 1,669,397 (90% Jewish).

Density per square mile: 207.4.

President: Itzhak Ben-Zvi.

Premier: Moshe Sharet.

Principal cities (est. Dec. 1953): Jaffa-Tel Aviv, 354,500 (industrial center); Haifa, 153,500 (chief port); Jerusalem (Israeli), 143,500 (capital).

Monetary unit: Israeli pound (£I).

**HISTORY.** The history of Palestine, cradle of two of the great religions of the world, and homeland of the modern state of Israel, is mostly a chronicle of invasion, conquest and confusing divisions. To the ancient Hebrews it was known as the "Land of Canaan"; the name Palestine is derived from that part of the country inhabited by the Philistines of Biblical times. About 1000 B.C. the Hebrews succeeded in establishing a single monarchy, which later split up into two kingdoms—Judah and Israel. The country was subsequently invaded and overcome by many peoples, including the Assyrians, Babylonians, Egyptians, Persians, Macedonians, Romans and Byzantines. In A.D. 634-36, Palestine was wrested from the Byzantine Empire by the Arabs. Frankish Crusaders captured Jerusalem in 1099 and set up a feudal kingdom which endured until the defeat of the Franks by Saladin (1187) and the restoration of Moslem rule. In 1516 suzerainty over the area was transferred from the Mamelukes of Egypt to the Turks. It remained part of the Ottoman Empire until World War I, when British forces under General Allenby defeated the Turks and captured Jerusalem (Dec. 9, 1917). The League of Nations mandate awarded to Great Britain was put in force on Sept. 29, 1923.

Meanwhile, a movement had been founded in 1897 by Theodor Herzl to cre-

ate a Jewish homeland in Palestine, and a considerable number of Jewish immigrants had entered the country prior to World War I. On Nov. 2, 1917, official British recognition was given both to the growing Arab nationalist movement and to the Zionist aspirations by the issuance of the so-called Balfour Declaration.

The declaration was attacked by the Arabs. Throughout the period between the two World Wars, outbreaks of violence and open revolt occurred. Jewish immigration continued, especially after the rise of Hitler. A British royal commission report approved by the British Government July 7, 1937, recommended the partition of Palestine into an Arab and a Jewish state separated by a mandated area in the vicinity of Jerusalem and at Nazareth. The Arabs opposed the proposal, advocating instead the establishment of an independent Palestine with full minority rights for the Jews. In May, 1939, the British Government issued a White Paper declaring the establishment of a Jewish state contrary to British obligations to the Arabs and promising, after a transitory period of ten years, the establishment of an independent Palestine in which Arabs and Jews would share authority in government. During the next five years, 75,000 Jews were to be allowed to enter Palestine. These proposals did not satisfy either party, and the League Mandates Commission questioned their validity, but the outbreak of World War II overshadowed all other issues.

Arab-Jewish co-operation in the war effort introduced a period of order, but the end of European hostilities in 1945 brought a renewal of friction and the formation of the Arab League in that year served to demarcate lines of opposition.

Attempts to bring Jewish immigrants into Palestine illegally were intensified thereafter, and terrorism grew apace. The report of a special U. N. investigating committee recommended to the General Assembly in Sept., 1947, that Palestine be partitioned into Arab and Jewish states which would be independent politically but united economically. Jerusalem would be under international trusteeship.

Acceptance of this majority report by the U. N. General Assembly on Nov. 29, 1947 touched off new outbreaks of violence which British troops had difficulty in controlling. The decision was generally accepted by the Jews, but members of the Arab League announced their determination to resist partition by force, if necessary.

Termination of the British mandate May 14, 1948, and withdrawal of British forces brought new violence. An independent state of Israel was immediately proclaimed



by the Jewish National Council, and Arab forces converged on Palestine from the south, north and east, spearheaded by the crack British-trained Arab Legion of King Abdullah of Jordan. Within a few hours Arab-Jewish hostilities were in full swing. On June 11, however, there went into effect a four-week truce supervised by Count Folke Bernadotte, Swedish U. N. mediator in Palestine. Fighting resumed on July 9, with Israeli forces gaining on all fronts except in Jerusalem, part of which had been taken by Jordani troops prior to the truce. On July 17 a second truce was effected on order of the U. N. Security Council. Bernadotte was assassinated on Sept. 17 by unidentified Jewish terrorists and his duties were taken over by Dr. Ralph Bunche of the United States.

Fighting broke out during the truce, chiefly at Jerusalem but also in western Galilee and the Negeb. A final cease-fire took effect on Jan. 7, 1949, and an armistice agreement was concluded with Egypt on Feb. 24 and with Jordan on April 3. During the hostilities Israel lost none of the territory allotted to it under the partition plan and increased that territory by about 50% by gaining western Galilee, a broad corridor to Jerusalem through central Palestine and part of modern Jerusalem. In April 1950 Jordan incorporated eastern and central Palestine, including the Old City of Jerusalem.

Israel's governmental structure took shape rapidly. Elections were held in Jan. 1949 for a constituent assembly which adopted a constitution on Feb. 14; the provisional leaders, Chaim Weizmann and David Ben-Gurion were confirmed as president and premier, respectively. Recognized by most non-Arab countries, the new nation was admitted to the U. N. on May 11, 1949, but Israeli-Arab relations remained hostile, with frequent border incidents.

Despite many cabinet crises, Ben-Gurion's government met with increasing success the problems arising out of an unfavorable trade balance, large numbers of immigrants and the urgent need for foreign capital investment and additional industries. In 1951 the floating of a \$500,000,000 bond issue in the U. S. was begun.

Dr. Weizmann died Nov. 9, 1952, and Itzhak Ben-Zvi was elected to succeed him as president on Dec. 8. Ben-Gurion resigned for reasons of health on Dec. 7, 1953; a new coalition government was formed by Moshe Sharett on Jan. 4, 1954.

**GOVERNMENT.** The declaration of independence, issued May 14, 1948, by the Jewish National Council (Vaad Leumi), stated that the new nation would be "based on the precepts of liberty, justice and peace taught by the Hebrew prophets." The constitution adopted by the constituent as-

sembly in 1949, provides a republican form of government headed by a president elected for a 5-year term by the Chamber of Deputies. Legislative power is vested in the Chamber of Deputies, the members of which are elected by the vote of all citizens who have reached the age of 21. The government is administered by the Cabinet, which is headed by the premier and is responsible to the Chamber of Deputies.

Elections held July 30, 1951, divided the 120 seats in the Chamber of Deputies (Knesset) as follows: Mapai (Labor), 46; General Zionist (rightist), 20; parties associated with Mapai, 17; Mapam (United Workers), 15; Communists, 5; others, 17.

The constitution characterizes Israel as the national home of the Jewish people and directs the admission of every Jew who desires to settle within its borders, subject to control of the Chamber of Deputies. Between May 1948 and Dec. 31, 1953, 723,800 Jewish immigrants entered Israel; the peak year was 1949 (239,141).

Military service is compulsory. The army numbered about 75,000 in 1951. The navy on Dec. 31, 1953, had 7 frigates and escort vessels and several other smaller craft.

**SOCIAL AND ECONOMIC CONDITIONS.** Education is under the supervision of the Ministry of Education. Kindergarten and elementary education is free; most secondary schools are semiprivate. In 1952-53 there were 945 elementary schools with 200,337 pupils, 68 secondary schools with 16,848 pupils and 201 Arab schools with 28,176 pupils. The Hebrew university in Jerusalem had 2,820 students in 1953-54.

Agriculture is the chief economic activity. The maritime plain, the plain of Esdraelon and the northern Jordan valley are the principal agricultural areas. Citrus growing, confined largely to the maritime plain, normally furnishes the major export crop. Production (1952-53) was 352,000 metric tons. Others include olives, rice, fruits and vegetables, figs, tobacco, wheat, barley, corn, sesame and potatoes. There are many collective and co-operative rural settlements.

Industry is developing rapidly, especially the food-processing, textile, metalworking and chemical groups. Diamond cutting, although dependent on rough diamond imports, is of major importance; and there are oil refineries and storage tanks at Haifa, a terminus of the pipeline from the Iraqi oil fields (suspended since 1948).

Recent foreign-trade statistics are as follows (in millions of Israeli pounds):

	1951	1952*	1953*
Exports	16.7	11.4	20.5
Imports	122.6	89.7	102.3

\* Calculated at the rate of £1 = U.S. \$2.80.

Chief exports in 1953 were citrus fruits (38%) and polished diamonds (22%).

Leading customers were Britain (26%), the U. S. (21%) and Turkey (14%); leading suppliers, the U. S. (32%), Britain (10%) and Turkey (4%). Leading imports were grain and flour (14%), machinery (12%) and iron and steel and manufactures (7%).

Internal communication is provided by 297 miles of railway (in operation, 1954) and a good highway network totaling 1,612 miles (1953). The excellent airport at Lydda, near Tel Aviv, is served by major international lines and El Al, Israel's international line, which flew 2,800,000 miles and carried 31,785 passengers in 1953. The merchant marine had 31 vessels (100 tons and over), aggregating 119,060 gross tons, on Dec. 31, 1953.

Israel has been heavily dependent on international loans. The budget (ordinary and development) for 1954-55 was initially placed at £1 571,000,000 (1953-54: £1 389,000,000). The foreign debt was the equivalent of U. S. \$406,000,000 on Dec. 31, 1953.

**NATURAL FEATURES AND RESOURCES;** **CLIMATE.** Northern Israel is largely a plateau traversed from north to south by mountains and broken by great depressions, also running from north to south.

The maritime plain of Israel is remarkably fertile, but the southern Negeb region, which comprises almost half the total area, is largely a wide desert steppe area. The Jordan, the only important river, rises in Syria and flows along the Jordan border through the Hule marshes and lake and the Sea of Tiberias (Gallilee) into Jordani Palestine and thence into the Dead Sea, 1,290 feet below sea level.

Mineral resources are limited. They include gypsum, sulfur, limestone, and rock salt, together with potash and bromine from the Dead Sea.

Summers are hot and dry, with occasional maximum temperature of 100°. The mean annual temperature at Jerusalem is 62.8°. Rainfall occurs chiefly in the autumn and spring; the mean annual average is 28 inches along the coast and 26 inches in Jerusalem.

## Italy (Republic)

### (Repubblica Italiana)

**Area:** 116,235 square miles.

**Population (est. 1953):** 47,041,000 (predominantly Italian).

**Density per square mile:** 404.7.

**President:** Luigi Einaudi.

**Premier:** Mario Scelba.

**Principal cities (census 1951):** Rome, 1,606,739 (capital); Milan, 1,264,402 (leading financial, industrial center); Naples, 1,003,815 (seaport); Turin, 711,492 (auto works); Genoa, 678,200 (seaport); Palermo, 482,594 (Sicilian seaport).

**Monetary unit:** Lira.

**Religions:** Roman Catholic, 99.6%; others (Protestant, Orthodox, Jewish), .4%.

**HISTORY.** Modern Italy did not exist as a unified country until 1870. Until A.D. 476, when the German Odoacer became head of the Roman Empire in the west, the history of Italy was largely the history of Rome. From A.D. 800 on, the Holy Roman Emperors, the Popes, Normans, Lombards and Saracens all vied for control over various segments of the Italian peninsula. Numerous city states, such as Venice and Genoa, and many small principalities flourished in the late Middle Ages.

In 1713, after the War of the Spanish Succession, Milan, Naples and Sardinia were handed over to Austria, but the Hapsburg influence on the peninsula was interrupted for a short time after 1800 when Italy was unified by Napoleon, who crowned himself King of Italy on May 26, 1805. After the Congress of Vienna in 1815, Austria continued to be the dominant power in Italy.

The movement for national unity began in the middle 19th century, staged by the "Young Italy" group headed by Giuseppe Mazzini. In 1858 Count Cavour, prime minister under King Victor Emmanuel II of Sardinia, secured the aid of Napoleon III of France in unifying Italy. After French and Sardinian forces had defeated the Austrians in 1859, Lombardy was annexed to Sardinia, and by the time the first Italian parliament opened at Turin in Feb., 1861, all Italy was represented except Venetia, held by Austria, and Rome, which was the territory of the Pope. On February 18, 1861, Victor Emmanuel II was proclaimed King of united Italy.

In 1866 Italy sided with Prussia against Austria and received Venetia; Rome was seized in 1870. In 1882 the young nation entered into the Triple Alliance with Austria and Germany. After war with Turkey in 1911-12, the Italians were awarded Tripoli in North Africa and the Dodecanese islands in the Aegean Sea.

Italy denounced the Triple Alliance on May 3, 1915, and declared war on Austria on May 24. By the treaty of St. Germain, on Sept. 10, 1919, the south Tirol (Upper Adige) and the Istrian peninsula were awarded to Italy.

In the years immediately following World War I, Italy was a virtual battleground between the Socialists and Benito Mussolini's new Fascist movement. The weak government was powerless to maintain order as the two sides fought for power. Finally, on Oct. 30, 1922, the Fascists staged their "March on Rome" and took over the government. Mussolini was named premier by King Victor Emmanuel III. Il Duce and his Fascist Grand Council soon made Italy into a corporate state, with himself as dictator.



In 1935-36 Italy successfully invaded, conquered and annexed Ethiopia, despite the complaints of the League of Nations and economic sanctions.

On November 6, 1937, Italy joined the German-Japanese anti-Comintern pact and on December 11 withdrew from the League of Nations. The Rome-Berlin Axis was converted into a full military alliance on May 22, 1939. Meanwhile, Italian troops had seized Albania in April, 1939.

On June 10, 1940, Mussolini suddenly announced Italy's declaration of war against France (already in the throes of defeat) and Britain. Italian troops were able to advance only a few miles into France before the armistice was concluded on June 24, under which Italy annexed a small strip of France. On October 28, 1940, Italian forces invaded Greece from Albania, but were driven back by the Greeks, who held a third of Albania by the time the Germans launched their Balkan campaign on April 6, 1941. Italy subsequently occupied parts of Yugoslavia and Greece. Following the German capitulation in North Africa and the fall of Sicily, Mussolini was ousted on July 25, 1943, and Marshal Pietro Badoglio formed a new government. On September 3, 1943, the date of the invasion of the Italian mainland by Allied forces, a military armistice was signed between General Eisenhower and Badoglio.

On June 9, 1944, five days after the Allies entered Rome, Badoglio was succeeded as premier by Ivanoe Bonomi, a Socialist, who formed a coalition cabinet. The government was recognized by the Allies as the *de facto* government of Italy on October 25, but only as a cobelligerent, not as an ally.

Upon the collapse of German resistance in the north, Mussolini was tracked down and put to death by partisan forces on April 28, 1945. On December 10, Alcide de Gasperi, a Christian Democrat, took over from Ferruccio Parri, who had succeeded Bonomi as premier in June.

On June 2, 1946, the Italian people voted in favor of a republic, and King Humbert II, who had succeeded his father on May 9, went into exile.

The new constitution drafted by the constituent assembly took effect on Jan. 1, 1948. Following the Communist defeat in the elections of April, 1948, De Gasperi formed another coalition cabinet from which the Communist and left-wing Socialist bloc was again excluded. Luigi Einaudi, veteran Liberal leader, was elected first president of the Republic on May 11. In April 1949, Italy adhered to the North Atlantic pact.

De Gasperi's centrist coalition lost ground to both leftist and rightist groups in parliamentary elections held June 7-8, 1953.

He gave way on Aug. 17 to Giuseppe Pella, who formed an all Christian Democrat cabinet. Pella was succeeded on Feb. 10, 1954, by Mario Scelba at the head of a coalition cabinet.

**GOVERNMENT.** Under the 1947 constitution Italy is a "democratic Republic founded on labor." The president is elected for seven years by parliament in joint session with regional delegates. The cabinet, headed by the premier and nominated by the president, must enjoy the confidence of parliament, which is composed of the Chamber of Deputies, popularly elected for a five-year term, and the Senate. All citizens are duty-bound to vote.

The Chamber of Deputies elected on June 7-8, 1953, had 590 members, of whom 261 were Christian Democrat, 143 Communist, 75 leftwing Socialist, 40 monarchist, 29 Social Movement (neo-Fascist) and 42 members of other parties. The Senate has 242 members.

**PEACE TREATY OF 1947.** The peace treaty which took effect Sept. 15, 1947, required Italian renunciation of all claims in Ethiopia and Greece, the cession of the Dodecanese to Greece, and of five small Alpine areas to France. In addition, the major part of the Istrian peninsula, including Fiume and Pola, went to Yugoslavia. The Free Territory of Trieste was carved out of the area to the west of the new Yugoslav frontier.

Italy was to pay reparations of \$100,000,000 in kind over a seven-year period to the Soviet Union, \$125,000,000 to Yugoslavia, \$105,000,000 to Greece, \$25,000,000 to Ethiopia and \$5,000,000 to Albania; also to make two-thirds restitution for war-time damage to Allied property in Italy. **DEFENSE.** The 1947 treaty required Italy to reduce the strength of her army to 250,000 men (including *carabinieri*), the navy to 25,000 (including naval air arm) and the air force to 25,000 (with 350 planes). The fleet was reduced to 2 battleships, 4 cruisers, 20 destroyers and large torpedo boats, plus smaller craft. Most of the defense restrictions were lifted on Dec. 29, 1951, over the objections of the U.S.S.R. The navy in Dec. 1953 had 2 battleships, 3 cruisers, 5 destroyers, 43 frigates and escort vessels, 4 submarines and many other smaller craft.

**SOCIAL AND ECONOMIC CONDITIONS.** *Education.* Elementary education is free and compulsory from 6 to 14. Elementary schools numbered 39,188 in 1949-50, with 4,815,239 pupils. The 3,420 government secondary schools had 786,196. In 1950-51, 27 universities and institutions of higher learning had 155,170 students.

*Religion.* Although the country is predominantly Roman Catholic, religious freedom is permitted. Catholic religious teaching is given in all elementary and



intermediate schools. Relations with the Church are regulated by the treaty with the Holy See of Feb. 11, 1929, which established the temporal power of the Pope over Vatican City.

**Agriculture.** Agriculture, the most important branch of Italy's economy, engages more than a third of the population. It is extremely diversified; differences of altitude, soil and climate allow the production of all European crops from rye to rice, from apples to oranges, and from hemp to cotton. Approximately 41,275,000 acres are cultivated. Italy ranks next to France in wine production (average 1948-52: 1,112,000,000 U. S. gal.; 1953: 1,135,000,000 gal.) and next to Spain in olive oil production.

**Crop data (in millions of metric tons):**

	1951	1952	1953*
Wheat	6,962	7,870	8,800
Rye	122	127	130
Barley	270	265	312
Oats	510	508	609
Sugar beets	5,847	5,739	5,980
Olive oil	355	183	301

\* Provisional.

**Livestock and dairy farming** are important in Italy. Of the 50-odd varieties of Italian cheese, the best known are the hard parmesan and pecorino (the latter made from ewe's milk) and the soft bel paese and gorgonzola. Cheese production in 1952 totaled 287,000 metric tons. In 1952 Italy had 8,690,000 cattle, 10,002,000 sheep and 4,212,000 hogs. Wool production (1952) totaled 10,000 metric tons (clean basis).

**Industry.** The 1951 census recorded 1,455,447 industrial firms employing 6,455,701 workers. Industrial production is centered in the north. The nature of the fascist corporate state had a tendency to foster industrial concentration prior to World War II. The textile industry is the largest and most important and supplies the home market as well as furnishing a large proportion of Italy's exports. The metal industries are handicapped by lack of coal, which must be imported in large quantities, and by insufficient iron ore reserves. The chemical, clothing and food industries are also important. Italy is a member of the European Coal and Steel Community.

Production in 1953 included cotton yarn, 163,200 metric tons; woven cotton fabrics, 107,880 tons; rayon yarn, 53,160 tons; pig iron and ferroalloys, 1,225,000 tons; raw steel, 3,456,000 tons; cement, 7,524,000 tons; automobiles, 143,000; trucks, 31,500.

**Trade.** Statistics of Italy's foreign trade, in billions of lire, are as follows:

	1951	1952	1953
Exports	1,029.5	866.5	930.0
Imports	1,356.9	1,459.7	1,497.5

Italy's leading customers by value in 1953 were western Germany (14%), the U. S. (10%), Britain (7%) and Switzerland (7%). Principal suppliers were the U. S. (13%), western Germany (12%), Britain (8%) and France (5%). Leading exports in 1952 were machinery and vehicles (21%), fruits and vegetables (13%), synthetic fibers and manufactures (11%) and cotton and manufactures (7%). Leading imports included cotton, coal and coke, wool, grain and petroleum and products.

**Communications.** According to Lloyd's Register, the merchant marine totaled 1,120 steam and motor ships (100 tons and over), aggregating 3,455,785 gross tons, on June 30, 1953. On April 1, 1954, 41 vessels of 304,192 gross tons were under construction in Italian yards. There are more than 150 seaports, of which the principal are Genoa, Venice, Savona, Naples and Leghorn. Coastwise traffic is particularly important because of difficult land communications. Railways open to traffic in 1950 totaled 13,449 miles. Highways totaled about 108,000 miles.

**Finance.** Data (in billions of lire):

	1950-51	1951-52	1952-53*
Revenue	1,282.6	1,684.7	1,704.0
Expenditure	1,764.3	2,117.3	2,132.0

\* Budget estimate.

The total internal debt was 3,803,620,000,000 lire on March 31, 1954.

**NATURAL FEATURES AND RESOURCES; CLIMATE.** Approximately 600 of boot-shaped Italy's 708 miles of length are in the long peninsula that projects into the Mediterranean from the fertile basin of the Po River. The Apennines, branching off from the Alps between Nice and Genoa, form the peninsula's backbone, and rise to a maximum height of 9,560 feet at the Gran Sasso d'Italia (Corno). The Alps are Italy's northern boundary.

Several islands form part of Italy. Sicily, 9,926 square miles, lies off the toe of the boot, across the Strait of Messina, with a steep and rock-bound northern coast and gentler slopes to the sea in the west and south. Mt. Etna, an active volcano, rises to 10,741 feet, and most of Sicily is more than 500 feet in elevation. Sixty-two miles southwest of Sicily lies Pantelleria, 45 square miles, and south of that are Lampedusa and Linosa. Sardinia, 9,301 square miles, just south of Corsica and about 125 miles west of the nearest Italian mainland, is largely mountainous, stony and unproductive.

Italy has many northern lakes, lying below the snow-covered peaks of the Alps. The largest are Garda (143 sq. mi.), Maggiore (83 sq. mi.) and Como (55 sq. mi.). The Po, the principal river, rises in the Alps on Italy's western border and crosses the Lombard plain to the Adriatic.

**Natural Resources.** Italy is ordinarily the world's largest producer of mercury; it is also an important producer of sulfur. In 1952, 1,926 metric tons of mercury and 238,000 tons of sulfur were produced. The nation lacks, however, the staple minerals of coal, oil and iron, and is forced to import them. Production of coal and lignite in 1953 was 1,903,000 metric tons; iron ore, 933,600 tons; petroleum, 656,000 barrels. Building stone, particularly marble, is plentiful. In the south Tirol and the central Apennines. Abundant hydroelectric power resources and deposits of natural gas are being increasingly exploited. In 1953 Italy generated 29,000,000,000 kwh. of electricity, mostly by hydroelectric plants.

**Forests.** Less than 20 per cent of Italy's area is forested. Principal products are soft and hard timber, charcoal and cork. The fishing industry does not fill domestic needs. Coral and sponges are marketed.

**Climate.** Italy's climate is variable. The Italian Riviera along the Gulf of Genoa is subtropical and highly favored by tourists. The winters in the high Apennines are cold and bitter. The western slope of peninsular Italy is warmer than the eastern side, and the Po basin in the north has cold winters and very hot summers. Sicily has a warm and equable climate. In Rome, December through February are the coldest months (average 47°), July and August the warmest (75°), with abundant sunshine. Rainfall is heaviest in the Alps and lightest in the lowlands (33 inches a year at Rome).

#### FORMER ITALIAN COLONIAL EMPIRE

Under the 1947 treaty, Italy ceded the Dodecanese to Greece and renounced title to her African possessions, which consisted of Libya, Eritrea and Italian Somaliland. Somaliland (now known as Somalia) remained under Italian administration as a U. N. trust territory.

**SOMALIA**—Status: U. N. trust territory under Italian administration.

Area: 198,000 sq. mi.

Population (est. 1952): 1,280,000.

Administrator: Enrico Martino.

Capital: Mogadiscio (population: 74,000).

Foreign trade (1951): exports, 29,968,287 somali\*; imports, 95,388,257 somali. Chief exports: bananas (34%), cotton (17%).

Agricultural products: dressed skins, cattle, sugar, cotton, cottonseed oil, fruits, bananas.

Forest products: gum, resin, kapok.

Mineral: tin.

\* One somalo = 14 cents U.S.

Somalia, a territory extending along Africa's east coast from the Gulf of Aden south to Kenya, fell within the Italian sphere of influence by treaties with the Somali sultans in 1889 and by agreements with Britain in 1905 and 1924, with the sultan of Zanzibar in 1905, and with Ethi-

opia in 1907. After the conquest of Ethiopia in 1936, the area was incorporated into Italian East Africa. It was occupied in Feb., 1941, by British troops.

Administration was turned over to Italy on Apr. 1, 1950, pursuant to a decision of the U. N. General Assembly on Nov. 21, 1949, under which the area is a U. N. trust territory. Administration is in the hands of Italy for a period of 10 years during which it is to be prepared for independence.

The overwhelming majority of the population are Somalis who belong to the Sunni sect of Islam; they are a pastoral, nomadic people whose livelihood depends on cattle, sheep and camels. However, the Italians (numbering 4,500 in 1950) established plantations in the south, especially in the fertile Juba region. The colony was far from self-supporting, requiring heavy Italian subsidy. The climate is torrid.

## Japan (Empire) (Nippon)

Area: 146,690 square miles.

Population (est. 1953): 86,300,000.

Density per square mile: 588.3.

Ruler: Emperor Hirohito.

Premier: Shigeru Yoshida.

Principal cities (census 1950): Tokyo, 5,385,071 (capital; financial, manufacturing center); Osaka, 1,956,136 (chief industrial center); Kyoto, 1,101,854 (manufacturing); Nagoya, 1,030,635 (machinery, textiles); Yokohama, 951,189 (seaport); Kobe, 765,435 (seaport, shipbuilding); Fukuoka, 392,649 (seaport, textiles); Sendai, 341,685 (manufacturing, educational center).

Monetary unit: Yen.

Language: Japanese.

Religions (1938): Buddhism, 60%; Shintoism, 21%; Protestant (215,166); Roman Catholic (118,856).

**HISTORY.** Japan's early history is inseparable from mythology. A series of legends attributes the creation of Japan to the sun goddess, from whom the later emperors were allegedly descended. The first of them was Jimmu Tennō, supposed to have ascended the throne on Feb. 11, 660 B.C.

Recorded Japanese history begins with the first contact with China in the 5th century A.D. Japan was then divided into strong feudal states, all nominally under the emperor, but with real power often held by a court minister or clan. In 1185 Yoritomo, chief of the Minamoto clan, was designated shogun (generalissimo) with the actual administration of the islands under his control. Clans came and went, but a dual government system—shogun and emperor—persisted till 1867.

First contact with the West came about 1542, when a Portuguese ship off course arrived in Japanese waters. Portuguese traders, Jesuit missionaries, and Spanish, Dutch and English traders followed. Sus-



picious of Christianity and Portuguese support of a local Japanese revolt, the shoguns restricted all foreigners in 1636-38 except the Dutch, who were confined to Nagasaki. Western attempts to renew trading relations failed until 1853, when Commodore Matthew Perry sailed an American fleet into Tokyo Bay with a letter from President Fillmore.

Japan now quickly made the transition from a medieval to a modern power. Feudalism was abolished and industrialization was speeded. An imperial army was established with conscription. The shogun system was abolished in 1867 by Emperor Meiji, and parliamentary government was established in 1889. After a brief war with China in 1894-95, Japan acquired Formosa (Taiwan), the Pescadores islands, and part of southern Manchuria. China also recognized the independence of Korea (Chosen), which Japan later annexed (1910).

In 1904-05 the new Japan won prestige by defeating Russia in the Russo-Japanese War, gaining the territory of southern Sakhalin (Karafuto) and Russia's port and rail rights in Manchuria. In World War I Japan, which took a negligible part in military operations, seized Germany's Pacific islands and leased areas in China. The Treaty of Versailles then awarded her a mandate over the islands.

At the Washington Conference of 1921-22, Japan agreed to respect Chinese national integrity. The series of Japanese aggressions which was to lead to the nation's downfall began in 1931 with the invasion of Manchuria. The following year, Japan set up this area as a puppet state, "Manchukuo," under Emperor Henry Pu-Yi, last of China's Manchu dynasty. On Nov. 25, 1936, Japan joined the Axis by signing the anti-Comintern pact. The invasion of China came the next year, and the Pearl Harbor attack was unleashed on Dec. 7, 1941.

For many months after Pearl Harbor, the Japanese Army and Navy enjoyed spectacular success, but by the end of 1942 the tide had begun to turn. Three years later the dropping of the world's first atomic bomb in combat on Hiroshima, followed by a second one on Nagasaki, knocked Japan swiftly into a surrender that already had become inevitable.

The formal surrender took place Sept. 2, 1945, aboard the battleship *Missouri* in Tokyo Bay. Southern Sakhalin and the Kurile Islands reverted to Russia, and Formosa (Taiwan) and Manchuria to China. The Pacific islands remained under U. S. occupation.

General of the Army Douglas MacArthur was appointed Supreme Commander for the Allied Powers (SCAP) Aug. 14, 1945. An 11-power (later 13-power) Far Eastern

Commission was created to lay down occupation policies, while the 4-power Allied council advised and consulted with SCAP in carrying them out.

Soon after the surrender Japan began the process of democratizing its political, social and economic structure under Allied eyes. Following the Socialists' victory in elections of April 20, 1947, Japan's first Socialist premier, Tetsu Katayama, a life-long Christian, formed a cabinet composed of Socialists, Democrats and members of the People's Cooperative party on May 31, 1947. Dissension between the left and right wings of his party forced Katayama's resignation on Feb. 10, 1948. He was succeeded by Hitoshi Ashida, a Democrat leader, on Feb. 21. Ashida yielded to Shigeru Yoshida on Oct. 14, 1948.

Pres. Truman removed Gen. MacArthur from his post as Supreme Commander for the Allied Powers on April 11, 1951, and named Gen. Matthew B. Ridgway in his place.

On Sept. 8, 1951, a treaty of peace with Japan was signed at San Francisco by the U. S. and 47 other nations. The U.S.S.R., Czechoslovakia and Poland were present at the conference but did not sign the treaty, which became effective April 28, 1952.

The treaty did not place any restrictions on Japan's political institutions, economy or armed forces. Japan was limited in territory to its 4 home islands, although the treaty did not recognize Soviet seizure of the Kurile Islands and South Sakhalin.

Conservative forces won an overwhelming victory in parliamentary elections held Oct. 1, 1952, and Yoshida was re-elected premier. A no-confidence vote forced new elections on Apr. 19, 1953, in which Yoshida's group lost ground, although he was re-elected premier.

**GOVERNMENT AND DEFENSE.** The constitution, effective May 3, 1947, made drastic changes in Japan's political system. The Emperor retains only ceremonial functions, and executive power is vested in the cabinet, headed by the premier and collectively responsible to the Diet. Law-making power is vested solely in the Diet, composed of two houses—the House of Representatives, popularly elected for four-year terms, and the House of Councillors, with 250 members elected for six-year terms. A bill of rights guarantees certain basic liberties. Women are enfranchised for the first time. Sovereignty, formerly vested in the Emperor, now is vested in the people, and the House of Representatives can override the veto of the House of Councillors by a two-thirds vote.

The elections of April 1953 distributed the 466 seats in the House of Representatives as follows (1952 standing in parentheses): Democratic Liberal, 199 (204);



Progressive, 76 (88); rightwing Socialist, 66 (60); leftwing Socialist, 72 (56); dissident Liberal, 35 (39); Communist, 1 (0); others, 17 (19).

**Ruler.** Emperor Hirohito, born April 29, 1901, succeeded his father, Yoshihito, on Dec. 25, 1926. He was married on Jan. 26, 1924, to Princess Nagako, born in 1903. To them were born two sons, Crown Prince Akihito (Dec. 23, 1933) and Prince Masahito (Nov. 28, 1935), and 5 daughters. Succession to the Japanese throne is in the male line only.

**Defense.** The peace treaty of 1951 placed no limitations on the right of Japan to rearm, but the constitution prohibited the maintenance of armed forces. A national "police" reserve was created in 1950, and legislation enacted in June 1954 provided for the creation of Japanese military, naval and air "defense" forces, to be built up over a period of 8 years (strength in July 1954 was 150,000), each service to have its own general staff. The maritime force had 24 frigates and escort vessels and other smaller craft in Dec. 1953; the U. S. made a loan of 2 destroyers and 2 destroyer escorts in 1954. The air force had 108 liaison craft in Jan. 1954; 143 fighter planes were to be delivered by the U. S. in 1954-55.

The bilateral defense pact between the U. S. and Japan which became effective April 28, 1952, provided for the indefinite disposition of U. S. armed forces in and about Japan. The U. S. was to furnish about \$150,000,000 in defense equipment under a mutual defense assistance agreement signed March 8, 1954.

#### SOCIAL AND ECONOMIC CONDITIONS.

**Education.** Article 26 of the 1947 Constitution provides that "all people shall have the right to receive an equal education correspondent to their ability," and that education shall be free and compulsory as provided by law. A 1947 law provided a simplified school structure with 6 years of elementary education (compulsory), 3 of lower secondary, 3 of upper secondary and 4 of university education. Under U. S. supervision the school curriculum has been simplified and purged of militaristic and chauvinistic influences. In April 1951, Japan had 21,313 elementary schools with 11,419,267 pupils, 14,301 secondary schools with 7,319,978 pupils and 422 colleges and universities with an enrollment of 420,634 students.

**Agriculture.** Japan is traditionally a land of small farms and, except in Hokkaido, the northernmost island, there is almost no large-scale farming and animal husbandry. The average holding is less than three acres. Double cropping makes self-sufficiency possible, but on a low level of subsistence.

#### Major crops (thousands of metric tons):

	1951	1952	1953*
Rice (rough)	11,302	12,404	10,298
Barley	2,169	2,078	2,095
Wheat	1,490	1,537	1,374
Potatoes	2,569	2,515	2,489
Sweet potatoes	6,290	5,534	6,205

\* Preliminary.

Production of silk cocoons (1953) was 93,090 metric tons; tea (1952), 57,150 tons. In 1952 there were 2,670,000 cattle, 799,000 pigs, 501,000 goats and 578,000 sheep.

**Industry.** Prewar Japan was one of the world's leading industrial nations and the only country in the Far East with highly developed textile, steel, machinery, chemical and electrical industries. The textile industry was dominant, but after 1931 considerable expansion took place in the heavy industries—metal, machinery-building and chemical—which were adaptable to war purposes.

Postwar industrial rehabilitation proceeded slowly, retarded by labor troubles and deterioration of equipment; by 1953, however, the index of industrial activity stood at 159% of the 1934-36 level. In 1952 there were 168,109 factories employing 5 or more persons, with total employment of 4,319,082.

#### INDUSTRIAL PRODUCTION

(Thousands of metric tons)

	1951	1952	1953
Pig iron and ferroalloys	3,127	3,474	4,518
Steel ingots	6,502	6,988	7,662
Cement	6,548	7,117	8,769
Cotton yarn	743*	799*	914*
Cotton fabrics	2,179†	2,239†	2,811†

\* Millions of lbs. † Millions of sq. yds.

Directives issued in 1945 effected the dissolution of the huge interlocking monopolies (*Zaibatsu*) in business and finance. Voting rights in the 80 major holding companies and 3,500 subsidiaries were taken over by a government commission which also seized securities held by members of *Zaibatsu* families, for resale to the public. **Trade.** Before World War II, Japan ranked fifth in world trade. Private trade was resumed in Sept., 1947. Recent data are as follows (in millions of U. S. dollars):

	1951	1952	1953*
Exports	1,354.5	1,272.9	1,274.8
Imports	1,995.0	2,028.2	2,409.6

\* Provisional.

Leading customers in 1953 were the U. S. (18%), Korea (9%), Indonesia (9%) and Hong Kong (5%); leading suppliers, the U. S. (31%), Australia (7%), Canada (5%) and Pakistan (4%). Leading exports were machinery (15%), cotton fabrics (14%), iron and steel products (11%), chemicals

(5%) and fish (4%). Imports included raw cotton (16%), rice (9%), petroleum and products (8%), wool (7%) and wheat (6%).

**Communications.** On Dec. 31, 1939, Japan had 4,084 ships of more than 100 tons, with an aggregate tonnage of 5,728,779. Before World War II the merchant marine carried almost 80 per cent of the foreign trade and was surpassed only by those of the U. S. and Britain. Wartime losses were enormous, but recovery was fairly steady. By June 30, 1953, there were 1,669 vessels (100 tons and over) with a gross tonnage of 3,250,412.

Railway mileage in 1949 was 17,017. The national and prefectural highway system totaled 83,025 miles in 1950.

**Finance.** World War II left Japan with a staggering public debt, mounting inflation and a disorganized financial system. Recent data on general account (in billions of yen) are as follows:

	1951-52*	1952-53*	1953-54†
Revenue	1,078.8	1,189.0	968.3
Expenditure	873.9	1,070.6	968.3

\* Provisional. † Budget estimate.

The national debt totaled 838,100,000,-000 yen on March 31, 1954.

**NATURAL FEATURES AND RESOURCES; CLIMATE.** Japan's four main islands are Honshu, Hokkaido, Kyushu and Shikoku. The Ryukyu chain to the southwest is U. S. occupied and the Kuriles to the northeast are Russian occupied. The surface of the main islands consists largely of mountains separated by narrow valleys. There are about 50 more or less active volcanoes, including famous Fujiyama near Tokyo (12,385 ft.).

**Minerals.** Japan is relatively poor in minerals. Crude oil production in 1953 in Japan proper was 2,100,000 barrels, about one-third of current domestic requirements. With coal production estimated at 46,531,000 metric tons, the nation was still confronted with a fuel shortage. Other minerals include lead, silver, gold and copper.

**Forests.** Japan is well-wooded, with about 60,000,000 acres of forest. Among forest products are bamboo, charcoal and timber. Wood pulp production in 1953 totaled 1,263,000 metric tons; newsprint (1952), 279,000 tons; lumber (1952), 14,-229,000 cubic meters.

**Fisheries.** Fishing, one of Japan's biggest industries, provides a staple food and considerable exports in normal years. The catch in 1952 amounted to 4,674,000 metric tons.

**Climate.** The Japanese climate ranges from subtropical in its southern extremes, to winter cold and snow in Hokkaido. The winter temperatures are moderated in the

central islands by the Japan Current. The mean annual temperature in Tokyo is 56° and the capital's annual rainfall amounts to 60 inches.

## Jordan (Hashemite Kingdom of)

Area (est.): 39,460 sq. mi.\*

Population (est. 1951): 1,400,000.\*

Density per square mile: 35.4.\*

Ruler: King Hussein I.

Prime Minister: Tewfik Abulhuda.

Principal cities (est.): Amman, 170,000 (capital); Jerusalem (Jordanian), 75,000 (religious center).

Monetary unit: Jordanian dinar.

Language: Arabic.

Religions†: Moslem (Sunni), except about 30,000 native Christians and 7,000 Circassians.

\* Including Arab Palestine (area: c. 2,350 sq. mi.; population: c. 1,000,000).

† Excluding Arab Palestine.

**HISTORY.** Jordan, once the Lordship of Oultre-Jourdain in the Latin Kingdom of Jerusalem, attracted world-wide attention in 1948 when its king, Abdullah, led Arab forces in the invasion of Palestine from the east. An ancient land, about the size of Indiana, the small kingdom was known in the time of Moses as Edom and Moab. It passed to the Amorites of Damascus and in A.D. 106 became part of the Roman province of Arabia. In 633-36 it was conquered by the Arabs, and a period of decline and depopulation ensued. It fell to the Turks in the 16th century.

Conquered from the Turks by the British in World War I, Jordan was separated from the Palestine mandate in 1920, and placed in 1921 under the rule of Abdullah ibn Hussein.

In 1923 Britain recognized Jordan's independence, subject to the mandate. During World War II, Jordan co-operated completely with Britain. On March 22, 1946, Britain abolished the mandate and recognized the full and complete independence of Jordan. That part of Palestine occupied by Jordanian troops was formally incorporated by action of the Jordanian parliament on Apr. 24, 1950.

Abdullah was assassinated June 20, 1951. His son Talal was deposed as mentally ill Aug. 11, 1952. Talal's son Hussein, born May 2, 1935, succeeded him.

**GOVERNMENT AND DEFENSE.** Jordan is a constitutional monarchy. The King rules with the aid of a cabinet of department heads responsible to parliament, which consists of the popularly elected chamber of deputies of 40 members and the senate of 20 appointed members. Arab Palestine is represented in both bodies.

Defense of the country is entrusted to the British-trained Arab Legion of about



15,000 men, the most effective force among all Arab armies. The Anglo-Trans-Jordanian treaty of March 20, 1948, replacing that of March 22, 1946, has mutual assistance provisions and permits Britain to maintain air force units. Jordan receives an annual defense subsidy of £3,000,000 from Britain.

**SOCIAL AND ECONOMIC CONDITIONS.** Life in Jordan is primitive; there are estimated to be 50,000 nomads and 120,000 seminomads. At least 95 per cent of the total area is desert. At least one-half the population is believed to be illiterate. In 1952 there were 783 elementary and 71 intermediate secondary schools with total enrollment of 139,000.

Most of the country is suitable only for pasturing sheep, goats and camels. Cultivated land is limited to a relatively small area west of the Hejaz Railway. In the drier cultivated areas of the plateau, the inhabitants retain tribal organization and still live in tents. Foreign trade is limited to the exchange of wheat, fresh fruit, wool and live animals for sugar, tea, and other necessities. Exports in 1952 were 1,500,000 dinars; imports, 17,400,000 dinars. Leading suppliers in 1952 were Britain (17%), Lebanon (13%) and Syria (11%). Most of the exports go to neighboring Arab countries.

Despite the sparse settlement of the country, Jordan has good roads to Israel, Syria and Iraq. It is crossed from north to south by the Hejaz Railway.

**TOPOGRAPHY AND CLIMATE.** Jordan is mainly a plateau with an average altitude of 3,000 feet, sloping gently eastward. The western edge is a steep slope overlooking the Rift Valley (Jordan River, Dead Sea and Wadi el Araba) 3,000-4,000 feet below. In the south are mountains over 5,000 feet high and a sandstone area cut by deep canyons. Jordanian Palestine is largely a hilly plateau. Jordan borders on the Red Sea for a few miles in the southwest. The subtropical steppe and desert have wet cold winters and dry hot summers. Rainfall near the escarpment decreases from about 26 inches in the north to 10 inches in the south. Average maximum temperature in August is 92°; average minimum in January is 39°.

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## Korea (Chosen)

Area: 85,225 square miles.  
Population (est. 1951): 30,000,000 (almost entirely Korean).  
Density per square mile: 352.0.

President: Syngman Rhee.  
Premier: Pyun Yung Tai.  
Principal cities (est. 1949): Seoul (Kyeong-song), 1,446,049 (capital); Fusan (Pusan), 473,619 (chief seaport); Pyongyang, 450,000 (capital, northern Korea); Taegu,

313,705 (silk center); Inchon, 265,767 (seaport).

Monetary unit: Hwan.

Languages: Korean, Chinese, Japanese.  
Religions: Buddhist, Confucianist, Taoist, Christian (500,300 Christians in 1938).

**HISTORY.** Korea, a peninsula about 600 miles long extending out from Asia between the Yellow Sea and the Sea of Japan, became an international battleground in 1950 when Communist troops of North Korea invaded the U. N.-recognized Republic of South Korea below the 38th parallel.

According to legend which may be partly historical, a Chinese sage named Kija founded the kingdom of Chosun ("Morning Calm") in 1122 B.C. and thus began a dynasty which lasted until 193 B.C. In 108 B.C. Korea was annexed to China, and later divided into three small principalities which formed the kingdom of Silla. Silla revolted in A.D. 918 and declared its independence. In 1592 the Koreans defeated a Japanese fleet and, with Chinese help, ousted the Japanese invaders from their land. In 1627, the Manchus seized Korea and placed it again under Chinese sovereignty. In the Chinese-Japanese War of 1894-95, Japan won predominant influence in Korea, and in 1905 reduced it to a protectorate. In 1910 Japan formally annexed Korea. A Korean bid for independence was crushed ruthlessly in 1919.

In Aug., 1945, at the end of World War II, Korea was occupied by Soviet and U. S. troops. The United States, United Kingdom and Soviet Union agreed at Moscow in Dec., 1945, that Korea should be placed under the trusteeship of those three powers and China for a period not to exceed five years. The U. S. and the U.S.S.R. were unable to agree on the formation of an all-Korean provisional government, and in Nov. 1947 the U. N. General Assembly set up a commission, boycotted by the U.S.S.R., to arrange for elections. Elections were held in the U. S. zone on May 10, 1948, for a national assembly, which on July 12 adopted a republican constitution and on July 20 elected Syngman Rhee president. The new republic was proclaimed on Aug. 15 and was recognized as the legal government of Korea by the U. N. General Assembly on Dec. 12, 1948. Meanwhile, a North Korean "People's Republic" had been formed in the Soviet zone north of the 38th parallel on May 1, 1948. It claimed jurisdiction over all of Korea.

On June 25, 1950, South Korea was attacked by North Korean Communist forces. U. S. armed intervention was ordered on June 27 by Pres. Truman and on the same day the U. N. invoked military sanctions against North Korea. Gen. Douglas MacArthur was named commander of U. N. forces on July 7. U. S. and South Korean



troops fought a heroic holding action, but by the first week of August, they had been forced back to a 4,000 sq. mi. beachhead in southeast Korea. There they stood off superior north Korean forces until Sept. 15, when a major U. N. amphibious attack was launched far behind the Communist lines at Inchon, port of Seoul. By Sept. 30, U. N. forces were in complete control of South Korea; they then invaded North Korea and were nearing the Manchurian and Siberian borders when several hundred thousand Chinese Communist troops entered the conflict in late October. U. N. forces then retreated successfully below the 38th parallel where in succeeding months they repulsed several major attacks. On May 24, 1951, they recrossed the parallel and had made important new inroads into North Korea when truce negotiations began on July 10 at Kaesong. The truce talks, later moved to Panmunjom, continued periodically in 1952 and 1953 amid sporadic hostilities. An armistice was finally signed at Panmunjom on July 27, 1953, leaving a devastated Korea in need of large-scale rehabilitation. The armistice contemplated an international political conference on the status of Korea, but negotiations for arranging it broke down. The question was discussed without result at the Geneva conference on Far Eastern problems (April 26-June 19, 1954).

The U. S. and South Korea signed a mutual defense treaty on Oct. 1, 1953, and in Aug. 1953 the U. S. Congress authorized the use of up to \$200,000,000 for the rehabilitation and economic support of South Korea.

**GOVERNMENT.** South Korea is a republic, with legislative powers vested in a bicameral parliament and executive power in a popularly elected president and a cabinet headed by a premier.

North Korea is a typical Soviet state under the constitution adopted on Sept. 2, 1948.

**SOCIAL AND ECONOMIC CONDITIONS.** In 1952, there were 2,525,369 pupils in elementary schools, 298,980 in middle schools, and 140,550 in higher schools. There is a university at Seoul.

The Korean population is more or less homogeneous and successfully withstood Japanese efforts to assimilate it. South Korea has 43 per cent of the peninsula's area and over two-thirds of its population.

Korea, predominantly agricultural, cultivates about 12,000,000 acres. Chief products are rice, barley, oats, rye, millet, soybeans, tobacco, cotton and wheat. The 1953 rice crop in South Korea was about 3,100,000 metric tons.

Industrial development was speeded in the last years of Japanese rule. The leading industries by value of output ordi-

narily are chemical, textile, food, beverage and tobacco. Korea north of the 38th parallel has by far the larger portion of the country's industry and abundant hydroelectric resources.

Korea's prewar foreign trade was closely linked with that of Japan. South Korea's postwar trade has been financed to a large extent by U. S. funds. Imports in 1952 totaled \$53,700,000 (excluding U. N.-financed imports totaling \$153,400,000); exports were \$26,500,000. Over 50% of the trade was with Japan. Chief imports were foodstuffs, mainly rice, and manufactured goods such as textiles and fertilizers; chief exports were raw materials. North Korea's trade is chiefly with Communist China and the U.S.S.R.

Land communications, well developed by the Japanese for strategic reasons, included about 3,500 miles of railway and 21,000 miles of highway in 1952.

South Korea is insolvent and dependent on U. S. and other contributions. The 1953-54 budget provided for expenditure of 73,400,000,000 hwan and revenue of only 30,400,000,000 hwan. The hwan was introduced in Feb. 1953 to replace the inflated won.

**NATURAL FEATURES AND RESOURCES; CLIMATE.** Korea's coast, with a rugged mountain range along the east, is fringed with more than a thousand islands. Several rivers are navigable for more than a hundred miles, including the Rakuto in the south, the Kan in the central region and the Yalu in the northwest, on the Manchurian border.

Korea's best mining regions are in the north. Leading products are coal, gold, silver, copper, tungsten ore, iron ore, graphite, lead, alum stone and pyrite ore.

Despite Japanese exploitation, considerable Korean forest areas remain, especially in the north.

The climate is about like that of the midwestern United States, except for a heavy rainy season in July and August. Annual rainfall is about forty inches.

## Latvia

Area: 25,395 square miles.

Population (est. 1950): 2,100,000 (1940: Lettish, 75.5% [1950: 58%]; Russian, 12%; German, 3.2%; Polish, 2.5%; others, 6.8%).

Density per square mile: 78.5.

Principal cities (est. 1939): Riga, 393,211 (capital); (est. 1935): Liepaja, 57,098 (seaport).

Language: Latvian.

Religions (census 1930): Lutheran, 56.6%; Roman Catholic, 23.7%; Greek Orthodox, 8.9%; others, 10.8%.

Descended from ancient Aryan stock, the Latvians were early tribesmen who settled

along the Baltic Sea and, lacking a central government, fell an easy prey to more powerful peoples. The German Teutonic Knights first conquered them in 1158 and ruled the area as two states—Livonia and Courland. Poland conquered the territory in 1562 and ruled until 1795 in Courland; control of Livonia was disputed between Sweden and Poland from 1562 to 1629. Sweden controlled Livonia from 1629 to 1721. Russia took over Livonia in the latter year, and Courland after the third partition of Poland in 1795. From that time until 1918, the Latvians remained Russian subjects, although they preserved their language, customs and folklore. The Russian Revolution of 1917 gave them their opportunity for freedom, and the Latvian Republic was proclaimed on Nov. 18, 1918.

The republic lasted little more than 20 years. It was occupied by Russian troops in 1939 and incorporated into the U.S.S.R. in 1940. German armies occupied the nation from 1941 to 1943-44, when they were driven out by the Russians. Most countries, including the U. S., have refused to recognize the Soviet annexation of Latvia.

## Lebanon (Republic)

Area: 3,475 square miles.

Population (est. Dec. 31, 1953): 1,368,000 (Arabian, Armenian, Circassian, Turk).

Density per square mile: 393.6.

President: Camille Chamoun.

Premier: Abdullah Yafi.

Principal cities (est. 1952): Beirut, 400,000 (capital, chief port); Tripoli, 110,000 (oil pipe-line terminus).

Monetary unit: Lebanese pound (£L).

Languages: Arabic, French.

Religions: Maronite, Greek Orthodox, Greek Catholic, Mohammedan.

**HISTORY.** Smaller than Connecticut, Lebanon lies at the eastern end of the Mediterranean, between Israel and Syria. In ancient times it was the mountainous hinterland of the Phoenician coast towns. From the 7th to the 11th centuries there infiltrated into southern Lebanon the heretics of Islam who finally coalesced into the Druse community.

In the 19th century the Turkish Sultanate encouraged the Druses to wage civil war against the Christian Maronites. After a massacre of 2,500 Christians in 1860, Lebanon was occupied by the French for a year. From 1864 to 1914, a Christian military government ruled the area under nominal Turkish sovereignty. After World War I, France received a League of Nations mandate over Syria and Lebanon. The French drew a Lebanese border in 1920 to offset predominantly Moslem Syria and proclaimed the area a republic under French control on May 23, 1926.

Vichy forces controlled Lebanon after

the fall of France in 1940, but the Allies replaced them by July 14, 1941. Despite Syrian objections, the French permitted Lebanon to declare its complete independence on Nov. 26, 1941. Lebanon joined the Arab League and took part in the invasion of Palestine on May 15, 1948.

Bishara el-Khoury, president since 1943, resigned in Sept. 1952 and was succeeded by Camille Chamoun.

**GOVERNMENT.** The modern Lebanese republic is governed by a president elected by parliament, for a six-year term, and a cabinet of ministers appointed by the president, but responsible to parliament, which has 44 members. An independent army has been formed, based on a cadre of native *troupes spéciales*, formerly part of the French army in the Levant. The last French troops were evacuated late in 1946.

**SOCIAL AND ECONOMIC CONDITIONS.** In 1951 there were 212,305 students attending 1,760 state, Moslem, Christian, private, French, American and British schools. Beirut has three universities. Students totaled 4,194 in 1951.

Lebanon produces tobacco, olives, grapes and other fruits, wheat and silk. Manufacturing is confined mainly to local consumers' goods. The silk industry is important in Beirut and Tripoli; cocoon production averages about 6,000 tons annually. Tobacco manufacturing is a government monopoly. An oil refinery was opened at Tripoli in 1950. (Output 1953: 544,471 metric tons.)

The customs union with Syria was dissolved in March 1950. Recent trade data are as follows (millions of Lebanese pounds):

	1951	1952	1953
Exports	97.7	77.6	87.8
Imports*	320.8	304.9	315.5

\* Valued at official rates.

Leading customers in 1953 were Syria (16%), Saudi Arabia (13%) and France (11%); leading suppliers, Syria (29%), the U. S. (14%) and France (10%). The leading exports were wool and fruits.

A rail line links Beirut with Damascus and Syria. Another, built in World War II by Allied engineers, runs from Tripoli to the Israeli border, and is part of a line from Cairo to Istanbul, via Haifa. One of the oil pipelines from the Kirkuk field in Iraq terminates at Tripoli; the trans-Arabian pipeline from Saudi Arabia ends at Sidon.

**TOPOGRAPHY AND CLIMATE.** The topography is varied. There is a narrow coastal plain, and the steep Lebanon Mountains reach heights of approximately 10,000 feet. There are no large streams. Iron ore deposits are worked in the south, and building stone and marble are plentiful. The



country also has thick deposits of inferior lignite coal. Lebanon has hot dry summers (about 80° in Beirut) and cool rainy winters (50°-60° in January). At Beirut, annual rainfall is more than 35 inches.

## Liberia (Republic)

Area: c. 40,000 square miles.

Population (est. 1953): 1,500,000 (Native Negro, 99%; American Negro, .8%; white, .1%; others, .1%).

Density per square mile: c. 37.5.

President: William V. S. Tubman.

Principal city: Monrovia (est. pop. 10,000; capital and chief port).

Monetary unit: U. S. dollar.

Languages: English (official), native tongues.

Religion: Protestant Christian (official); Mohammedan, Catholic, Pagan.

**HISTORY.** The history of Liberia, Africa's only republic, dates from 1816, when the American Colonization Society received a charter from the U. S. Congress, authorizing it to send emancipated Negro slaves to the west African coast.

The first settlers, who were led by Jehudi Ashmun, landed in 1822 at Cape Mesurado near the present site of Monrovia. White governors, named by the society, administered Liberia until 1841. On July 26, 1847, independence was proclaimed, and the first president was Joseph J. Roberts, a Virginia octoroon of considerable ability.

After 1920 considerable progress was made toward opening Liberia's interior, but even today only about 100,000 of its inhabitants are regarded as civilized, and lack of transportation hampers development of the heavily forested inland. In 1942, a U. S.-Liberian agreement admitted U. S. troops to build strategic airports.

In 1944 an agreement provided for permanent U. S. military and naval bases.

**GOVERNMENT.** The government is modeled after that of the United States. The president and vice president are popularly elected for eight years. The 31-member House of Representatives is elected for four years and the ten-member Senate for six years. Suffrage is extended only to landowners over 21 who are of Negro blood, but a 1946 constitutional amendment provides for the seating in the House of an aborigine from each province in the hinterland. Liberia's army of about 4,000 men is organized on a militia basis.

**SOCIAL AND ECONOMIC CONDITIONS.** Education, compulsory in theory, is conducted in 350 schools, about half state and half mission. Attendance is about 33,000. There are six state high schools, a normal school, a state college and the Booker T. Washington Industrial and Agricultural Institute, supported by U. S. donations.

The English-speaking descendants of U. S. Negroes, known as Americo-Liberians, are the intellectual and ruling class. The aborigines, virtually all uncivilized, are divided into some 28 tribes speaking different dialects. Some are Moslems or pagans. Christians include Anglicans, Methodists, Catholics, Baptists and Presbyterians. There are a number of foreign missions.

Agriculture, on a crude level, is the principal means of livelihood for the tribal Liberians, who raise coffee, rice, sugar cane and cassava. Native manufacturing is non-existent except for small industry, and the country's only big enterprise is the million-acre concession granted in 1925 to the Firestone Plantations Company for rubber cultivation. Exports (Sept. 1951-Aug. 1952) were 24,416 long tons. A large iron ore concession has been developed in the Bomi Hills area by Republic Steel Corp.; the first shipment left Monrovia in June 1951. Exports in 1951-52 totaled 664,859 long tons.

Most of the trade is with the United States. Exports (Sept. 1951-Aug. 1952) totaled \$37,156,271, including rubber (86%), iron ore (8%) and palm kernels (3%). Imports were \$18,146,338, mostly textiles, vehicles, machinery, petroleum and food.

Liberia's first railroad, a 43-mile narrow-gauge line from Monrovia to the Bomi Hills iron-ore concession, began operation in 1951. Coastwise and international air service is supplied by Pan American Airways. Interior travel is still largely by foot with native bearers, but important progress in road construction was made during and after World War II. There are no harbors except a port and naval base completed in 1947 at Monrovia, with U. S. assistance, at a cost of more than \$19,000,000.

**TOPOGRAPHY AND CLIMATE.** Liberia, about the size of Ohio, has a 350-mile frontage on the west coast of Africa, between the Ivory Coast and Sierra Leone. Its only well developed area is a low coastal strip running inland about seven miles. Beyond that is a low plateau, some of it mountainous, traversed by many rivers, of which the Cavalla (Kavalli) and the St. Paul's are the most important. The climate is tropical throughout, with rainfall up to 150 inches a year on the coast.

## Libya (Kingdom)

Area: 679,340 square miles.

Population (est. 1951): 1,124,000 (Berber, with Arab admixture, 93%; Italian, 5%; Jewish, 2%).

Density per square mile: 1.7.

Ruler: King Idris I.

Prime Minister: Mustafa ben Halim.

Principal cities (est. 1950): Tripoli, 144,616 (joint capital); Misurata, 70,000



(coastal city); Bengasi, 59,087 (joint capital).

Monetary unit: Libyan pound (£L).

Languages: Arabic, Italian.

Religions: Mohammedan (93%), Christian (5%), Jewish (2%).

**HISTORY AND GOVERNMENT.** Libya, stretching along the northern coast of Africa between Tunisia and Egypt, was a part of the Turkish dominions from the 16th century until 1911. Following the outbreak of hostilities between Italy and Turkey in the latter year, Italian troops occupied Tripoli; Italian sovereignty was recognized the next year by the Treaty of Ouchy.

Libya was the scene of much desert fighting during World War II. After the fall of Tripoli on Jan. 23, 1943, it came under Allied administration. The U. N. General Assembly voted on Nov. 21, 1949, that Libya should become independent by 1952.

Following the adoption by the constituent assembly of a constitution, the independence of the country was proclaimed by King Idris I on Dec. 24, 1951.

Under the constitution, Libya is a hereditary monarchy with a federal form of government. Tripolitania, Cyrenaica and the Fezzan are the constituent provinces. It has a bicameral parliament consisting of a senate of 24 members, half named by the king and half by the 3 provincial legislatures, and a house of representatives elected on a proportional representation basis according to population. The cabinet, headed by the prime minister, is responsible to the federal parliament.

The ruler, King Idris I, hereditary head of the powerful Senussi sect in Cyrenaica, was born in 1890.

**SOCIAL AND ECONOMIC CONDITIONS.** Tripolitania, with one-sixth the area, has 70% of the population. About 76% of the population is rural and about 45% of that is nomadic or seminomadic. A large proportion of the area is desert.

Animal husbandry is the basic economic activity, and there are considerable numbers of cattle, sheep, camels and goats. Agriculture is possible only in the Mediterranean coastal region, where dates, olives, citrus fruit, wheat and barley are grown, and in oases in the Fezzan and elsewhere; here the principal product is dates. Sponge and tunny fisheries are carried on off the coast.

Important exports include wool, hides, skins, cattle, horses, sponges and esparto grass.

Railroads total 242 miles. A road extends along the coast. The principal means of communication inland are the caravans, which follow traditional routes.

**TOPOGRAPHY AND CLIMATE.** The area has three natural divisions from the coast

inland—the Mediterranean coastland, the sub-desert, and the desert.

Winters are cool and summers warm along the coast, and hotter in the interior. Bengasi has an average temperature of 55° in January and 78° in July. Rainfall in the Tripoli area is about 15 inches a year.

## Liechtenstein (Principality)

Area: 65 square miles.

Population (census 1950): 13,757 (mostly German).

Density per square mile: 211.6.

Ruler: Prince Franz Joseph II.

Chief of Government: Alexander Frick.

Principal city (census 1950): Vaduz, 2,735 (capital).

Monetary unit: Swiss franc.

Language: German.

Religion: Roman Catholic.

Tiny Liechtenstein lies on the east bank of the Rhine, just south of Lake Constance, between Austria and Switzerland. It abolished its army in 1868 and has managed to stay neutral and undamaged in all European wars which have occurred since that date.

Founded in 1719, Liechtenstein became independent in 1866. Franz Joseph II, the reigning prince, was born in 1906, and succeeded his great uncle, Franz I, in 1938. In 1943 he married Countess Gina Wilczek, of Austria.

The constitution of 1921 provided for a legislature, the *Landtag*, of 15 members elected by direct, universal suffrage. Liechtenstein adopted Swiss currency in 1921, and has been part of the Swiss Customs Union since 1924. Its foreign trade statistics are included in those of Switzerland, which also administers the country's telegraph and postal service.

Wheat, wine and fruit are the chief products. There are small manufactures of cotton, leather and pottery.

In 1954 there were 18 elementary and secondary schools, with total enrollment of 2,254.

Liechtenstein's area includes low valley land and upland peaks—Falkais at 8,401 feet, and Naafkopf, 8,432 feet. The chief mineral product is marble.

## Lithuania

Area: 22,958 square miles.

Population (est. 1950): 3,000,000 (1940: Lithuanian, 81% [1950: 55%]; German, 4%; Polish, 3%; Russian, 2%; others, 10%).

Density per square mile: 125.4.

Principal cities (est. 1942): Vilnius (Vilna), 182,000 (capital); (est. 1941) Kaunas, 120,000 (river port).

**Language:** Lithuanian.

**Religions:** Roman Catholic, 80%; Lutheran, 5.5%; others, 14.5%.

Southernmost of the three Baltic states, Lithuania in the middle ages was a grand duchy joined to Poland through royal marriage. Poles and Lithuanians merged forces to defeat the Teutonic Knights of Germany at Tannenberg in 1410 and extended their power far into Russian territory. In 1795, however, following the third partition of Poland, Lithuania fell into Russian hands and did not gain its independence until 1918, toward the end of World War I.

The republic was occupied by the U.S.S.R. in 1939 and annexed outright the following year. From 1940 to 1944 it was occupied by German troops and then was retaken by the Soviet Union. Western countries, including the U. S., have not recognized the Russian annexation.

## Luxemburg (Grand Duchy)

**Area:** 1,010 square miles.

**Population** (est. Dec. 31, 1953): 304,000 (Luxemburgian, French, German).

**Density** per square mile: 300.9.

**Ruler:** Grand Duchess Charlotte.

**Premier:** Joseph Bech.

**Principal city** (census 1947): Luxembourg, 61,590\* (capital; iron and steel).

**Monetary unit:** Luxembourg franc.

**Languages:** Luxemburgian, French, German.

**Religion:** Mainly Roman Catholic.

\* Population actually present at time of census.

**HISTORY.** Luxembourg is a small buffer state between France, Germany and Belgium. Invaded and occupied in both World Wars I and II despite the fact that its neutrality was guaranteed, Luxembourg suffered most in the latter war, when the Nazis deported several thousand natives as slave labor.

Sigefrol, Count of Ardennes, an offspring of Charlemagne, was Luxembourg's first sovereign ruler. In 1060 the country came under the rule of the House of Luxembourg. From the 15th to the 18th centuries, Spain and Austria held it in turn. The Congress of Vienna in 1815 made it a Grand Duchy and gave it to William I, King of the Netherlands. In 1839 the Treaty of London ceded the western part of Luxembourg to Belgium.

After the Nazi invasion on May 10, 1940, the government fled the country, returning in 1944 after Allied troops had liberated it. In 1948 the grand duchy joined the Western European Union, and in April, 1949, it adhered to the North Atlantic Pact.

**GOVERNMENT.** Luxembourg is a constitutional monarchy with the crown hereditary in the House of Nassau. The sovereign, Grand Duchess Charlotte, was born Jan.

23, 1896. The heir to the throne is Prince Jean, born Jan. 5, 1921.

The constitution of 1868, as amended in 1919, provides for democratic government through a chamber of deputies of 52 members, popularly elected for six-year terms. The constitution leaves to the sovereign the right to organize the government, which consists of a minister of state who is president of the government (premier) and at least 3 other ministers. There is also a council of state of 15 members, chosen for life by the sovereign.

**SOCIAL AND ECONOMIC CONDITIONS.** Education is compulsory for all children between the ages of 6 and 13. The common or idiomatic language is *letzeburgesch*; German and French are also spoken. Illiteracy has been practically nil since 1900.

Although the soil is not very fertile, agriculture is prosperous. Principal crops are potatoes, oats, wheat, rye and grapes. Wine production in 1953 was 2,625,000 U. S. gal.

The mining and metallurgical industries, based on iron ore found in the south, are the most important. In 1953 an average of 25 blast furnaces employed 18,870 workmen and produced 2,721,781 metric tons of pig iron. Production of steel ingots was 2,659,200 tons. Electrical energy produced in 1953 totaled 878,443,000 kwh. Other industries include brewing, sparkling wine, leather, textiles and cement.

By a customs union between Belgium and Luxembourg which came into force on May 1, 1922, to last for 50 years, customs frontiers between the two countries were abolished. On Jan. 1, 1948, an economic union with Belgium and the Netherlands (Benelux) came into existence. Luxembourg's foreign trade figures are included in those of Belgium and no separate statistics are available; exports consist chiefly of iron and steel products.

Transportation facilities in 1950 included 340 miles of railway and 2,673 miles of highway, of which 1,320 miles were improved.

Luxembourg's prosperity depends largely on its rich iron ore mines, which produced 7,169,647 metric tons in 1953.

## Maldiv Islands (Sultanate)

**Area:** c. 115 square miles.

**Population** (est.): c. 93,000.

**Density** per square mile: c. 808.7.

**Sultan:** Amir Mohammed Farid Didi.

**Prime Minister:** Ibrahim Ali Didi.

**Principal city** (est.): Malé, 8,000 (capital).

**Monetary unit:** Rupee.

**Languages:** Sinhalese (dialect), Arabic.

**Religion:** Mohammedan.

The Maldiv Islands, about 400 miles to the southwest of Ceylon in the Indian Ocean, were first visited by the Portu-



gues in the 16th century. They came under British protection in 1887 and were a dependency of the colony of Ceylon until 1948, when relations with Britain were formalized in a treaty which left domestic affairs in the hands of the islanders.

For centuries a sultanate, the islands adopted a republican form of government in 1952, but the sultanate was restored in Feb. 1954. There is a bicameral legislature which is popularly elected.

The people are great traders and fishermen. Besides fishing, coir making is the chief local industry. Exports include coir, coconuts, copra, millet and fruit.

The islands consist of 12 coral atolls with about 2,000 small islands, of which about 300 are inhabited.

## Mexico (Republic) (Estados Unidos Mexicanos)

Area: 758,061 square miles.

Population (est. 1953): 28,053,000 (mestizo, 55%; Indian, 29%; white, 15%; others, 1%).

Density per square mile: 37.0.

President: Adolfo Ruiz Cortines.

Principal cities (census 1950): Mexico City, 2,234,795 (capital); Guadalajara, 377,016 (manufacturing); Monterrey, 333,422 (metallic industries); Puebla, 223,667 (cotton textiles); Mérida, 142,858 (sisal); San Luis Potosí, 125,662 (mineral smelting).

Monetary unit: Peso.

Language: Spanish, 86%; Indian, 14%.

Religion: Predominantly Roman Catholic.

**HISTORY.** Mexico's early history is shrouded in mystery. At least two civilized races—the Mayas and later the Toltecs—preceded the wealthy Aztec empire conquered in 1519–21 by the Spanish under Hernando Cortez. Spain ruled for the next 300 years until 1810 (the date was Sept. 16 and is now celebrated as Independence Day), when the Mexicans first revolted. They continued the struggle and finally won independence in 1821 by the Treaty of Córdoba.

Turbulent years followed. From 1821 to the first presidency of Porfirio Díaz in 1877, there were two emperors, several dictators and enough presidents and provisional executives to make a new government on the average of every nine months. Mexico lost Texas (1836), and after defeat in the war with the United States (1846–48) it lost the area comprising the present states of California, Nevada and Utah, most of Arizona and New Mexico, and parts of Wyoming and Colorado.

In 1855 the Indian patriot Benito Juárez began a series of liberal reforms including the disestablishment of the Catholic Church, which had acquired vast property. A subsequent civil war was interrupted by the French invasion of Mexico (1861), the

crowning of Maximilian of Austria as emperor (1864), and then his overthrow and execution by forces under Juárez, who again became president in 1867.

During the rule of the dictator Porfirio Díaz (1877–80 and 1884–1911) the country was freed from political strife, made substantial economic progress, and gained a respected position in foreign affairs. But Díaz' reactionary land policy led to revolution and his resignation in 1911. The next few years were marked by bloody political-military strife, and trouble with the United States culminating in the punitive expedition into northern Mexico (1916–17) in unsuccessful pursuit of the bandit-politician Pancho Villa.

Lázaro Cárdenas (1934–40), backed by the National Revolutionary Party (PRI), began a socialistic program of land distribution to peasants, government seizure of foreign-owned oil lands, and broad labor reforms. General Manuel Avila Camacho, president during World War II, co-operated closely with the United Nations and followed Cárdenas' policy at home.

In July, 1946, Miguel Alemán was elected president, backed by the Avila Camacho administration and the PRI. Alemán continued the internal policy initiated by Cárdenas; his administration was marked by continued cordial relations with the United States. Adolfo Ruiz Cortines, the administration candidate, was elected to succeed him in quiet elections held in July 1952; he took office Dec. 1.

**GOVERNMENT AND DEFENSE.** The president, popularly elected for six years and ineligible to succeed himself, governs with a cabinet of ministers. The Federal Congress has two houses—the 161-member Chamber of Deputies, elected for three years (one for each 170,000 population) and the 58-member Senate, elected for six years. All married male citizens at least 18, and all single male citizens at least 21 are eligible to vote. Women received the right to vote in 1953.

Each of the 29 states has considerable autonomy, with a popularly-elected governor, legislature and local judiciary. The president appoints the governors of the two Federal territories, and the governing body of the Federal District.

Military service is compulsory, and the president holds supreme command of the armed forces, through the Secretary of War. The national army, greatly modernized during World War II, numbered about 55,000 men in 1951; the air force had 270 planes and two U. S.-trained squadrons. The small navy had 3 gunboats, 4 frigates, 1 armed transport and 22 coast guard vessels in 1951.

**SOCIAL AND ECONOMIC CONDITIONS.** Education. Illiteracy is one of Mexico's big problems, and the government is try-



ing hard to reduce the rate, estimated at 21 per cent in 1950, as against 60 per cent in 1930. Education is free, compulsory from 6 to 16, separated from the church, and under Federal control. There were 29,036 primary schools in 1950 with an enrollment of 3,986,428. In 1949, 466 general secondary schools had 80,598 students. The 12 universities had 35,602 students; about 22,000 attended the University of Mexico at Mexico City.

**Agriculture.** Primitive agricultural methods are steadily giving way to modern practices. More than 17,000,000 acres are under cultivation. About 2,775,000 acres are irrigated, but the eventual total of watered land is expected to be 12,000,000 acres. The Yucatán peninsula, at the southern end of the Gulf of Mexico, raises more than half of the world supply of sisal hemp (97,297 metric tons in 1952).

Production estimates for principal crops in 1952-53 were as follows, in metric tons: wheat, 476,000; maize, 3,759,000; rice (rough), 195,000; oranges, 530,000; cotton (lint), 271,000; cottonseed, 420,000; coffee, 1,450,000 bags of 132 lb. each. Sugar production amounted to 757,000 tons for the year 1952.

Stockraising is important on non-arable land. Mexico's inventory of livestock in 1951 showed an estimated 14,600,000 cattle, 6,000,000 sheep, and 6,000,000 hogs.

**Industry.** Total value of industrial production in 1952 was 5,892,089,000 pesos, of which cotton yarn and thread accounted for 16%; beer, 11%; iron and steel, 10%; and sugar, 9%. Other products were flour, soap, cigars and cigarettes, rubber manufactures, vegetable oils, paper, wool, silk and rayon yarn and cloth, cement, shoes and glass. In 1953, 260,000 metric tons of pig iron and 430,000 tons of steel were produced.

**Trade.** Foreign trade data, in millions of pesos, are as follows:

	1951	1952	1953*
Exports	4,956	5,022	4,637
Imports	7,112	6,986	7,099

\* Preliminary.

Chief exports in 1953 were cotton (24%), coffee (12%), lead (9%), copper (6%) and petroleum and products (5%). The U. S. took 74% of the exports and supplied 82% of the imports. Other leading customers were Japan, Britain and Belgium. Leading imports of the nation included wheat, machinery, vehicles and iron and steel products.

**Communications.** Mexico has about 17,000 miles of railroad. There were over 14,000 miles of improved highway in 1952. The merchant fleet had 64 vessels (100 tons and over) aggregating 157,384 gross tons on June 30, 1953, according to *Lloyd's Register*. Veracruz and Tampico, on the Gulf of Mexico, are the country's most important ports.

**Finance.** Recent government financial data are as follows (in millions of pesos):

	1952*	1953†	1954‡
Revenue	5,367.6	4,158.1	4,800.0
Expenditure	5,521.6	4,158.1	4,800.0

\* Preliminary. † Voted estimate. ‡ Cabinet budget.

The national debt amounted to 4,147,000,000 pesos on Dec. 31, 1951. The estimated national income in 1952 was \$5,433,500,000.

**NATURAL FEATURES AND RESOURCES; CLIMATE.** Mexico is a great, high plateau, open to the north, with mountain chains on east and west and with ocean-front lowlands lying outside of them. It has two big spears—the peninsula of Lower California which is mountainous, and the Yucatán peninsula, which is mostly a low plain. The eastern mountains are marked by high volcanoes.

**Minerals.** Mexico is one of the richest mineral countries in the world. It outranks all other countries in silver production (1953: 47,885,335 troy oz.). Other minerals, with 1953 production, are gold, 483,471 oz.; lead, 221,549 metric tons; zinc, 216,539 tons; copper, 60,148 tons; and antimony, 3,687 tons. A considerable variety of other industrial minerals is produced. Deposits of uranium are reported to exist.

Most of the Mexican mining properties are foreign-owned, and the industry is declining in relative importance. The oil fields, lying along the east coast, were seized by the government in 1938, but later the foreign owners were indemnified. There are 15 refineries with daily capacity of 250,000 barrels. Production in the year 1953 was 73,100,000 barrels. Reserves are limited.

**Forests.** Mexico's forests are of considerable importance; they include pine, oak, fir, mahogany, red and white cedar and primavera. Resins, turpentine and vegetable wax are also produced. Yucatán produces nearly all of the world's chicle, the juice of the saponilla tree, used as the base of chewing gum.

**Climate.** Partly in the torrid and partly in the north temperate zone, Mexico has three distinct climate regions. From the coasts inland to the plateau it is tropical, with temperatures sometimes topping 100°, but averaging from 77° to 82°. The plateau is sub-tropical with an average of 75°, and the mountains, over 6,000 feet, average 60°. On the east coast the annual rainfall sometimes reaches 100 inches, while in Lower California rain hardly ever falls. Rainfall on the plateau is 20 to 40 inches a year, comparable to that of the west central United States. In Mexico City the coldest months are December and January (about 55°); the warmest, April and May (65°). The wet season extends from April to September.

## Monaco (Principality)

Area: .59 square mile (375 acres).  
 Population (est. 1951): 20,000.  
 Density per square mile: 33,898.3.  
 Ruler: Prince Rainier III.  
 Principal cities (census 1946): Monaco, 1,854; La Condamine, 9,421; Monte Carlo, 7,967.  
 Monetary unit: French franc.  
 Language: French.  
 Religion: Roman Catholic.

A tiny, hilly wedge driven into the French Mediterranean coast nine miles east of Nice, Monaco is a little land of pleasure with a tourist business that runs as high as 1,500,000 visitors a year. Monaco had popular gaming tables as early as 1856. Five years later, a 50-year concession to operate the games was granted to François Blanc, of Bad Homburg. This concession passed into the hands of a private company in 1898.

The Phoenicians, and after them the Greeks, had a temple on the Monacan headland honoring Heracles. From *Monoi-kos*, the Greek surname for this mythological strong man, the principality took its name. After being independent for 800 years, Monaco was annexed to France in 1793 by the French Revolutionists, and was placed under Sardinia's protection in 1815. In 1861, it went under French guardianship but continued to be an independent country.

Prince Albert of Monaco gave the principality a constitution in 1911, creating a national council of 21 members popularly elected for four years. The government is under a ministry, acting on the prince's authority. The ruler, Prince Rainier III, born May 31, 1923, succeeded his grandfather, Louis II, on the latter's death, May 9, 1949.

## Mongolian People's Republic (Outer Mongolia) (Republic)

Area: 580,158 square miles.  
 Population (est. 1950): 900,000 (Mongol, except for about 100,000 Russians and 50,000 Chinese).  
 Density per square mile: 1.55.  
 Prime Minister: Y. Tse Den-bal.  
 Principal city (est. 1951): Ulan Bator Khoto (Urga), 80,000 (capital).  
 Monetary unit: Tugherik.  
 Languages: Mongolian, Russian.  
 Religion: Lama-Buddhism.

**HISTORY AND GOVERNMENT.** The Mongolian People's Republic, known also as Outer Mongolia, is a Russian satellite that measures more than twice the area of Texas. It contains the original homeland of the historic Mongols, whose power reached its zenith during the 13th century under Kublai Khan. The area accepted Manchu rule in 1689, but after the Chinese

Revolution of 1911 and the fall of the Manchus in 1912, the northern Mongol princes expelled the Chinese officials and declared independence under the Khutukhtu or "Living Buddha." In 1921, Soviet troops entered the country and facilitated the establishment of a republic by Mongolian revolutionaries in 1924 after the death of the last Living Buddha. China, meanwhile, continued to claim Outer Mongolia but was unable to back the claim with any strength. Under the Chinese-Russian Treaty of 1945, China agreed to give up Outer Mongolia, which, after a rigged plebiscite, became nominally independent.

The government of the republic is strikingly similar to the Soviet system. The Great Hural or Huraldan (parliament) is elected by universal suffrage, meets at least once in three years and picks 30 members to act as an executive committee—the Little Hural—which in turn selects a presidium of seven members as an interim body. A cabinet of ten ministers appointed by the Little Hural governs the country.

**SOCIAL AND ECONOMIC CONDITIONS.** A number of young Mongols are regularly sent to the U.S.S.R. for technical training. In 1952, there were said to be 400 primary and secondary schools, 14 technical schools and 2 higher-education institutions in the republic.

The country is largely pastoral. There are few areas suitable for crop growing, but some millet, rye and wheat are produced. Most of the people are essentially nomadic or seminomadic; flocks and herds remain the chief source of wealth.

There are a few industrial enterprises. All land, natural resources, factories, mines, hay-making stations and public utilities are nationalized.

Foreign trade, a state monopoly, is carried on mainly with the Soviet Union, but also with Communist China. The leading exports are livestock, wool, hides, animal hair, meat and furs.

**NATURAL FEATURES AND RESOURCES; CLIMATE.** The productive regions of Outer Mongolia—a tableland ranging from 3,000 to 5,000 feet in elevation—are in the north, which is well drained by numerous rivers, including the Kerulen, Tola, Orkhon and Selenga.

Reserves of 500,000,000 tons of coal are said to exist in the Nalaikha field near Ulan Bator Khoto. Some gold is mined. Deposits of antimony, copper, iron ore, lead, graphite, mercury, sulfur and silver exist.

The climate is continental, with hot summers and cold winters. Mean temperature at Ulan Bator Khoto is 15° in January and 64° in July. Rainfall is light throughout the country, and is almost negligible in the Gobi Desert in the southeast.



## Morocco (Protectorate)

(Maroc)

Area: 161,691 square miles (French 153,-870; Spanish 7,589; Tangier 232).

Population (est. 1950): French Morocco, 8,410,000; Spanish Morocco, 1,398,000; Tangier, 111,000.

Sultan: Moulay Mohammed ben Arafa.  
French Resident General: François Lacoste.

Spanish High Commissioner: Lt. Gen. Rafael García Valino.

Administrator of Tangier: José Luiz Archer (Portugal).

Principal cities (census 1947): Casablanca, 551,222 (chief seaport); Marrakesh, 238,277 (trading center); Fez, 200,946 (commercial center); Rabat, 161,946 (French administrative center); Tetuán (est. 1945), 93,658 (Spanish administrative center).

Monetary units: French franc, Spanish peseta.

Languages: Arabic, French, Spanish.

Religions: Chiefly Mohammedan.

**HISTORY.** Morocco, about the size of California, is just south of Spain across the Strait of Gibraltar and looks out on the Atlantic from the northwest shoulder of Africa. It was once the home of the Berbers, who helped the Arabs invade Spain in A.D. 711 and then revolted against them and gradually won control of large areas of Spain for a time after 739.

The country was ruled successively by various native dynasties and maintained regular commercial relations with Europe, even during the 17th and 18th centuries when it was the headquarters of the famous Sallí pirates. In the 19th century, clashes with the French and Spanish became frequent. Finally, in 1904, France and Spain divided Morocco into zones of French and Spanish influence, and these were established as formal protectorates in 1912.

Meanwhile, Morocco had become the object of big-power rivalry, which almost led to a European war in 1905 when Germany attempted to gain a foothold in the rich mineral country. By terms of the Algeciras Conference (1906), Morocco was internationalized economically and France's privileges were limited. War again seemed imminent in 1911, when Germany dispatched a warship to Agadir in an evident attempt to intimidate France. Again the dispute was settled, however, and this time Germany recognized France's right to establish a protectorate over Morocco.

The Tangier Statute, concluded by Britain, France and Spain in 1923, created an international zone at the port of Tangier, permanently neutralized and demilitarized. In World War II Spain occupied the zone, ostensibly to insure order, but was forced to withdraw in 1945, and the international rule was re-established.

The French zone in Morocco was under

the Vichy government of France during part of World War II, but three days after the Allied landing in North Africa in 1942 it came under Allied control.

Sidi Mohammed ben Youssef, sultan since 1927, was ousted by the French on Aug. 20, 1953, and replaced by his uncle, Moulay Mohammed ben Arafa.

**GOVERNMENT.** Morocco nominally is an absolute monarchy under a sultan, but actually the French resident general at Rabat and the Spanish high commissioner at Tetuan direct Moroccan policies to a large extent. The sultan lives in the French zone, and delegates authority to representatives in the Spanish zone and Tangier.

Tangier is governed by an international administration and a council of control composed of the consuls general of the signatories to the Act of Algeciras.

**SOCIAL AND ECONOMIC CONDITIONS.** Most of the natives are illiterate; some get rudimentary education in Koranic schools or state-maintained institutions. Education is provided in both zones for Europeans.

The natives are Berbers, roughly divided by customs and way of life into three groups—the Rif group along the coast, the central or Berber group in the mid-Atlas Mountains, and the southern or Chleuh in the high Atlas and the Sus. There is a large Jewish population. Most of the Europeans live in the cities.

Morocco is essentially agricultural. In the French zone, about 25,000,000 acres are arable, with 1953 production of wheat coming to 950,000 metric tons; of barley (1952), 1,220,000 tons. Corn, beans, peas, hemp, sorghum, citrus fruits and dates also are raised. Production of olives in 1952 was 73,000 tons. In 1951 there were 10,960,000 sheep and (1952) 2,135,000 cattle.

In the Spanish zone, agriculture is largely undeveloped, but it has potential importance. Barley, wheat, maize and sorghum crops are the most important.

Manufacturing industries introduced by Europeans, mostly small, produce chemicals, flour, leather, stone, beverages and textiles. Native industries include carpet weaving and making Turkish slippers.

Exports from the French zone in 1953 totaled 93,827,000,000 fr.; imports, 171,537,000,000 fr. Chief exports were phosphate (19%), fish (9%), barley (8%), manganese and citrus fruits. France took 48% of the exports and supplied 56% of the imports, which included sugar, vehicles, petroleum products, cotton cloth and tea. Exports from the Spanish zone in 1948 totaled 206,422,000 pesetas and imports 572,422,000 pesetas. A large proportion of the trade is carried on with Spain. Major exports are iron ore, fish and grain; imports include flour, sugar, tea, wine and textiles. Tan-



gier's exports in 1953 were 2,936,440,000 fr.; imports were 13,232,785,000 fr.

Railroads in 1951 totaled 984 miles in the French zone and 57 miles (standard gauge) in the Spanish zone. Highway mileage in the same year was approximately 7,425 in the French zone, about 540 in the Spanish zone and 65 in Tangier. Casablanca, which handles 80 per cent of the French zone trade, has perhaps the world's largest artificial port.

The ordinary budget for the French zone in 1952 balanced at 54,953,000,000 fr. The budget for the Spanish zone in 1952-53 balanced at 378,844,383 pesetas. The 1954 ordinary budget of the international administration at Tangier placed revenue at 1,633,326,950 fr. and expenditure at 1,602,453,136 fr.; extraordinary revenue, 499,000,000 fr.; expenditure, 413,318,000 fr. Customs receipts provide most of the revenue.

Exploitation of French Morocco's almost inexhaustible deposits of phosphate is a state monopoly and produced a total of 4,097,000 metric tons in 1953. Other major minerals are coal, cobalt, iron ore, manganese ore, molybdenum, tin, zinc and lead. Iron ore (1953: 931,200 metric tons) is the chief mineral of the Spanish zone; others are antimony and manganese.

**NATURAL FEATURES; CLIMATE.** On the Atlantic coast is a fertile plain; the Mediterranean coast is mountainous, making most of the Spanish zone a rugged area. The Atlas Mountains, running northeastward from the south to the Algerian frontier, average 11,000 feet in elevation.

Morocco's climate is essentially Mediterranean, modified by the Atlantic. On the Atlantic coast the temperatures are relatively cool (at Mogador, 61.5° in January and 72.3° in August). Inland the climate is more continental, with colder winters and hotter summers (at Fez, 50° in January, 80.6° in August). Rainy seasons are in October-November and April-May (38 inches annually at Tangier, 22 at Rabat, 17 at Casablanca, 11 at Mogador). Snow falls at altitudes above 3,000 ft.

## Nepal (Military Oligarchy)

Area: c.54,000 square miles.

Population (est. 1952): 7,000,000 (Gurkha [predominant], Magar, Gurung, Bhotia [Tibetan], Newar).

Density per square mile: c.129.6.

Ruler: Tribhubana Bir Bikram.

Prime Minister: M. P. Koirala.

Principal city and capital: Katmandu (estimated population, 108,800).

Monetary unit: Nepalese rupee.

Languages: Parbatia, Gubhaju, Tibetan.

Religions: Hinduism, Buddhism.

**HISTORY.** A landlocked country about the size of Iowa, lying between the Republic of India and Tibet, Nepal has two great

distinctions. It contains Mt. Everest, 29,141 feet high, the tallest measured mountain in the world. And it produces some of the toughest fighting men in the world—the Gurkhas.

Led by Rajah Prithwi Narayana, the Gurkhas invaded Nepal from India in 1768 and conquered it. A commercial treaty was signed with Britain in 1792, and in 1816, after more than a year's hostilities, the Nepalese agreed to allow British residents to live in Katmandu, the capital. In 1923 Britain recognized the absolute independence of Nepal. The United States and Nepal signed a treaty of friendship and trade on April 25, 1947. King Tribhubana was deposed on Nov. 7, 1950, but was returned to the throne with Indian assistance on Feb. 15, 1951.

Nepalese troops assisted the British during the Indian Mutiny, the Tibet War of 1904, World War I, the Afghan hostilities of 1919, and World War II.

**GOVERNMENT.** Until 1951, real power was vested in the prime minister, nominated by special rules from among the royal family. The king now appoints the prime minister and cabinet members, who are responsible to him. The first commoner prime minister, M. P. Koirala, took office in Nov. 1951. The king took over the government himself for a period in 1952-53.

The predominant Gurkhas are essentially a military caste. The army numbers about 20,000 regulars and 25,000 reserves. More than 100,000 Gurkha volunteers fought with the Indian Army in the Burma campaign of World War II.

**ECONOMIC CONDITIONS.** Cultivated and irrigated where possible, the main valley of Nepal grows rice, wheat, pulse, fruits, vegetables, spices, sugar cane and potatoes. A few sheep and cattle are grazed. Manufacturing is limited to native handicraft, but jute and textile mills are being established. Trade with India and Pakistan passes through various frontier stations, and there are two mountain trade routes to Tibet.

Main exports include hides, skins, opium, gums, resins, dyes, jute, wheat, pulse, rice, spices and timber. Two railroads enter Nepal for short distances—one from Raxaul, India, to Amlekhganj, the other from Jayauagar to Bijulpura. Transportation is for the most part difficult. A 79-mi. motor road between Katmandu and Raxaul, India, was opened in Dec. 1953.

**NATURAL FEATURES AND RESOURCES; CLIMATE.** Along its southern border, Nepal has a strip of level land which is partly forested, partly cultivated. North of that is the slope of the Himalayan Range, including Mt. Everest (29,141 ft.), which was climbed for the first time in 1953, and many peaks higher than 20,000 feet. Mineral resources, nearly all unexploited, in-

clude lignite, copper, zinc, lead, sulfur, marble and iron. Southern Nepal has valuable forests which yield gum, timber, resin and dye. Hemp plants grow wild. Mean temperature is 60°, with the hot season from April to June. Most of the rainfall occurs from June to October.

## Netherlands (Kingdom) (Koninkrijk der Nederlanden)

Area: 12,514 square miles.\*  
Population (est. Jan. 1, 1954): 10,550,737  
(practically all Dutch).  
Density per square mile: 843.1.  
Sovereign: Queen Juliana.  
Prime Minister: Willem Drees.  
Principal cities (est. 1954): Amsterdam, 858,702 (capital, financial center); Rotterdam, 704,646 (chief port); The Hague ('s Gravenhage), 590,755 (seat of government); Utrecht, 241,635 (railway center); Haarlem, 165,142 (tulip center); Eindhoven, 149,460 (industrial center).  
Monetary unit: Guilder.  
Language: Dutch.  
Religions (census 1947): Roman Catholic, 38.5%; Dutch Reformed, 31.0%; other Protestant, 13.3%; Jewish, 0.2%; others and no creed, 17.0%.

\* Land area only.

**HISTORY.** Julius Caesar found the low-lying Netherlands inhabited by Germanic tribes, the Nervii, Frisii and Batavi. The Batavi on the Roman frontier did not submit to Rome's rule until 13 a.c., and then only as allies. A part of Charlemagne's empire in the 8th century A.D., the area later passed into the hands of Burgundy and the Austrian Hapsburgs and finally in the 16th century came under Spanish rule. When Philip II of Spain suppressed political liberties and the growing Protestant movement in the Netherlands, a revolt led by William of Orange broke out in 1568. Under the Union of Utrecht in 1579, the seven northern provinces became the Republic of the United Netherlands.

The Dutch East India Company had been established in 1602, and by the end of the 17th century Holland was one of the great sea and colonial powers of Europe.

Following Napoleon's defeat, the United Netherlands and Belgium became the "Kingdom of the United Netherlands" under William I, son of William V and head of the House of Orange. The Belgians withdrew from the union in 1830, forming their own kingdom. William I abdicated in favor of William II in 1840; the latter was largely responsible for the promulgation of a liberal constitution in 1848.

The Netherlands continued to prosper during the long reign of William III from 1849 to 1890. The male line of the House of Nassau became extinct with his death

in 1890 and he was succeeded by his 10-year-old daughter, Wilhelmina, who was crowned Queen in 1898.

Neutrality was maintained during World War I, but overseas trade suffered heavily from the Allied blockade and German submarine warfare. At the outbreak of World War II neutrality was again proclaimed, but German troops invaded the country May 10, 1940, and by May 15, Dutch forces were ordered to lay down their arms. Queen Wilhelmina and Crown Princess Juliana fled to London, where a government-in-exile was established under Prime Minister P. S. Gerbrandy.

The German Army in the Netherlands capitulated May 5, 1945, and on May 23, the Dutch government met once more in The Hague. Queen Wilhelmina abdicated after her fiftieth anniversary as ruler on Sept. 6, 1948, and was succeeded by Juliana, her only daughter.

The Labor party gained a plurality in elections held in June 1952, and Drees continued as prime minister at the head of a coalition government.

**RULER.** Queen Juliana, who was born April 30, 1909, was married on Jan. 7, 1937 to Prince Bernhard of Lippe-Biesterfeld (born in 1911). They have four daughters: Beatrix, heiress apparent (born Jan. 31, 1938); Irene (born 1939); Margriet Franciscas (born 1943), and Maria Christina (born 1947).

**GOVERNMENT AND DEFENSE.** The Netherlands is a constitutional and hereditary monarchy, with female succession taking place only in default of male heirs.

Executive power is vested exclusively in the sovereign, while legislative power rests with the sovereign and the States-General (Parliament). The upper chamber of Parliament, with 50 members, is elected for 6 years by the provincial states. The lower chamber, which shares with the government the privilege of initiating new bills and proposing amendments, consists of 100 deputies who are elected directly for four years and retire *en bloc*. Executive power is exercised in part by responsible ministers, headed by the prime minister and holding office at the pleasure of the sovereign. Suffrage is universal for all Dutch subjects of 23 years of age. The party standing in the lower chamber (elections of June 1952) is as follows: Catholic 30, Labor 30, Anti-Revolutionary 12, Christian Historical Union 9, Freedom and Democracy 9, Communist 6, others 4.

Each of the eleven provinces has a local representative body—a Provincial State—presided over by a royal commissioner. Each of the 1,014 communes has a locally elected council and a mayor appointed by the crown.

**Defense.** Military service is compulsory. The army had about 175,000 men in 1949,



and the air force 300 planes. The navy on Jan. 1, 1954, had 1 fleet carrier, 4 light cruisers, 6 destroyers, 7 submarines, 15 frigates and escort vessels and many other smaller craft.

A separate air force was created in 1953.

**SOCIAL AND ECONOMIC CONDITIONS.** *Education.* Education is compulsory from the ages of 7 to 13; illiteracy is almost unknown. In 1951-52, elementary schools numbering 7,214 (of which 4,816 were private) had a total enrollment of 1,270,815; 1,307 secondary schools had 216,078 pupils. The 6 universities and 4 *hogescholen* (vocational colleges) had 29,130 students. The 4 public universities are at Leyden, Utrecht, Groningen and Amsterdam; the 2 private universities are the Calvinist University of Amsterdam and the Roman Catholic University of Nijmegen.

*Agriculture.* Dutch farms are characteristically small, with only a few larger than 250 acres. Wheat (248,800 metric tons in 1953), barley (279,100 tons), rye (430,700 tons), oats (483,600 tons), potatoes (3,679,000 tons) and sugar beets (2,970,800 tons) are grown, but dairying is more important. In 1953 there were 2,930,000 cattle, 1,964,500 hogs, 423,500 sheep and 244,500 horses. Production of cheese (1953: 140,875 metric tons), milk (5,700,000 tons), butter (83,095 tons) and eggs (232,000,000 doz.) is under state control. Large quantities of vegetables and fruits are raised for export. Almost as important as the dairy industry is the raising of tulip, hyacinth and other flower bulbs in the area around Haarlem. Net value of agricultural and horticultural production in 1952-53 was 5,113,000,000 guilders.

*Industry.* The Netherlands is a highly industrialized nation, utilizing both overseas raw materials and domestic agricultural products. Leading industries are textiles, clothing, shipbuilding, shoes, food, and building materials.

The Netherlands ranks high among the world's shipbuilding nations; 132 vessels of 479,460 gross tons were under construction on March 31, 1954. Production of pig iron in 1953 was 594,000 metric tons; steel, 860,000 tons. Amsterdam is one of the world's leading diamond-cutting centers.

*Trade.* The adverse balance of trade increased markedly after the end of World War II. Trade statistics, in millions of guilders (excluding parcel post, specie and diamonds) are as follows:

	1951	1952	1953
Exports	7,414.7	8,007.0	8,059.9
Imports	9,671.0	8,511.4	8,944.9

Principal customers in 1953 were Belgium (16%), western Germany (14%), Britain (11%), the U. S. (8%) and France (5%). Leading suppliers were Belgium (17%), western Germany (15%), the U. S. (10%),

Britain (9%) and Indonesia (5%). The chief exports were dairy products and eggs (13%), machinery and apparatus (9%), fabrics and clothing (8%), petroleum products (7%) and vehicles and ships (7%). Leading imports were machinery, iron and steel and manufactures, petroleum and products, cereals and flour and fabrics and clothing.

*Communications.* The Dutch merchant marine had 1,287 seagoing vessels of 3,282,640 gross tons on Jan. 1, 1954—the seventh largest fleet in the world. An extensive network of rivers expanded by many canals has led to extensive development of inland shipping. The length of navigable canals and rivers is almost 5,000 miles. River ships and barges numbered 16,435 on Jan. 1, 1954, with a total deadweight tonnage of 4,311,482. In 1953, 92,000,000 metric tons of freight were carried on rivers and canals. The wealth of water transport has obviated the need for wide railway development. In 1952, there were 2,095 miles of railway, all operated by a government-owned company, and, in 1951, 7,800 miles of primary and secondary highways.

Air service is provided by Royal Dutch Airlines (KLM) which flew 30,275,000 miles on 80 routes in 1953 and carried 599,650 passengers.

*Finance.* Recent financial data are as follows (in millions of guilders):

	1952*	1953†	1954†
Revenue	6,666	6,055	5,566
Expenditure	5,784	6,651	6,562

\* Provisional. † Budget estimate.

The national debt on Dec. 31, 1953, including debt to the Netherlands Bank and war damage obligations, totaled 22,302,000,000 guilders.

**NATURAL FEATURES AND RESOURCES; CLIMATE.** Part of the great plain of north and west Europe, the Netherlands has maximum dimensions of 190 by 160 miles and is low and flat except in Limburg in the southeast, where some hills rise to 300 feet. About half the country's area is below sea level, making the famous Dutch dikes a requisite to use of much land. Reclamation of land from the sea through dike-building has continued through recent times, and such land is usually very fertile.

All drainage reaches the North Sea, and the principal rivers—Rhine, Maas (Meuse) and Schelde—have their sources outside the country. The Rhine is the most heavily used waterway in Europe, and nearly three-fourths of its 75 to 85 million tons of annual prewar traffic was handled through the port of Rotterdam.

Netherlands minerals are few. The only important ones are coal (12,300,000 metric tons in 1953), crude petroleum (5,700,000 barrels), lignite and salt. There also are peat swamps and about 630,000 acres



of forest. The Netherlands fishing fleet made a catch of 310,000 metric tons valued at 96,100,000 guilders in 1953. Herring (158,800 tons) was the most important item.

Marsh mists, dense sea fogs and a humidity exceeding 80 per cent mark the Netherlands climate. Winters are colder than in eastern England at the same latitude. Utrecht, roughly central in location, has a January average temperature of 34.2° and a July average of 62.6°. Average rainfall for the country is about 28 inches. July–Sept. is the wettest period.

#### NETHERLANDS OVERSEAS TERRITORIES\*

**NETHERLANDS ANTILLES**—Status: Part of the United Kingdom of the Netherlands.

Area: 403 square miles.

Population (est. 1952): 176,000.

Capital: Willemstad (pop. 1951: 48,000).

Governor: A. A. M. Struycken.

Foreign trade (1952): exports, 1,379,229,000 florins; imports, 1,523,611,392 florins. Chief export: petroleum products (more than 95 per cent).

Agricultural products: aloes, beans, corn. Manufactures: refined petroleum, straw hats.

Mineral products: lime phosphate, salt.

This comprises two groups of Caribbean islands 500 miles apart; one, about 40 miles off the Venezuelan coast, consists of Curaçao (210 sq. mi.), Bonaire (95 sq. mi.) and Aruba (69 sq. mi.); the other, lying to the northeast, consists of 3 small islands with a total area of 29 square miles. The Dutch acquired the island of Curaçao from Spain in 1634 and have held it since, except for short intervals during the Napoleonic Wars.

The economy of the Netherlands Antilles is based almost entirely on the refining at Curaçao and Aruba of crude petroleum, which comes chiefly from the adjacent Maracaibo fields in Venezuela.

Dutch is the official language, but many inhabitants speak a patois known as Papiamentu, a mixture of Spanish, Dutch, English, Portuguese, native and other words.

The island of Curaçao has a torrid climate, with average temperatures of 79° in January and 83° in September. Rainfall is light, averaging only 16 inches annually. It occurs mostly in the October–January period.

**SURINAM (Dutch Guiana)**—Status: Part of the United Kingdom of the Netherlands.

Area: 164,291 square miles.

Population (est. 1952): 227,000.\*

Capital: Paramaribo (pop. 1951: 78,000).

Governor: J. Klaessenz.

Foreign trade (1952): exports, 45,852,000 Surinam guilders; imports, 56,465,000 guilders. Chief export: bauxite (79%).

\* For Indonesia, see page 645.

Agricultural products: rice (1952: 54,092 metric tons), sugar, coffee.

Minerals: bauxite (1952: 3,163,748 metric tons), gold (6,140 troy oz.).

Forest products: balata (1952: 319 metric tons), timber.

\* Including aborigines, numbering about 25,000.

Surinam lies in northeastern South America between British and French Guiana. It was received by the Dutch from England at the Peace of Breda (1667) in exchange for New York and at that time included British Guiana, which was seized by England in 1803 and formally ceded to her at the conclusion of the Napoleonic Wars.

The governor of Surinam (appointed by the crown) is assisted by an all-native legislature and cabinet, which have sole responsibility in all matters relating to domestic affairs.

Mining is the most important activity, and only about 65,000 acres are devoted to agriculture. The largest bauxite mines are owned by Aluminum Company of America subsidiaries. In 1946 a company was formed to work 10,000,000 acres of the area's vast, but almost inaccessible, hardwood forests.

In 1948 the heterogeneous population included 2,100 Europeans, 2,560 Chinese, 22,000 Djukas (descendants of escaped slaves), 3,700 aboriginal Indians, 81,750 Negroes and mulattoes, as well as 97,000 Indian and East Indian laborers brought in after the abolition of slavery in 1863 to work the sugar plantations.

From its settled coastal plain, Surinam runs back to a virtually unexplored mountain and jungle area along the Brazilian border. Rivers are the chief means of interior travel. The climate is tropical throughout but is modified by the northeast trade winds. Yearly range of temperature is approximately 70.5°–90°. Annual rainfall in Surinam is about 90 inches along the coast.

**NETHERLANDS NEW GUINEA**—Status: Part of the United Kingdom of the Netherlands.

Area: 151,789 sq. mi.

Population (est. 1953): 750,000.

Capital: Hollandia (pop. 1951: 32,000).

Governor: Jan van Baal.

Agricultural products: sago, coconuts, sugar cane, sweet potatoes.

Minerals: petroleum (1951: 262,000 metric tons), nickel, chrome.

The western part of New Guinea, second largest island of the world, with smaller adjacent islands, forms part of the kingdom of the Netherlands. The area remained Dutch upon the transfer of sovereignty in Indonesia in Dec., 1949, with the understanding that its status would be determined within one year by negotiation between the Netherlands and Indo-

nesia. Subsequent negotiations did not lead to any agreement.

Dutch influence dates back to the activities of the Dutch East India Company in the 17th century. In 1828, the Dutch government declared Northwest New Guinea part of the Dutch East Indian colonies, and the area was administered as part of the Netherlands Indies until 1949.

The Papuans are the dominant stock; there are also Melanesian and Negrito elements. There were about 8,000 Europeans, 6,000 Indonesians and 1,700 other Asiatics (chiefly Chinese) in 1953. Production of petroleum began in 1948 at oilfields in the Vogelkop region (Berau Penin) on the western tip of the island. Except for this, commerce and industry are almost unknown, and life is primitive, with head-hunting and cannibalism not unknown even today.

## Nicaragua (Republic)

### (República de Nicaragua)

Area: 57,143 square miles.\*

Population (est. 1953): 1,166,000 (1943: mestizo, 69%; white, 17%; Negro, 9%; Indian, 5%).

Density per square mile (land only): 20.4.

President: Anastasio Somoza.

Principal cities (census 1950†): Managua, 109,352 (capital); León, 30,544 (trading center); Granada, 21,035 (trading center); Chinandega, 13,146 (sugar).

Monetary unit: Córdoba.

Language: Spanish.

Religion: Roman Catholic.

\* Including inland water area of 3,475 square miles.

† Urban population of municipios.

**HISTORY.** Nicaragua was first visited by the Spaniards in 1522. The chief of the country's leading Indian tribe at that time was called Nicaragua, from whom the nation derived its name. The country was part of Spanish Guatemala until the general Central American revolution in 1821. Upon the dissolution of the Central American Union in 1838, Nicaragua established itself independently. A United States naval force intervened in 1909 after two American citizens had been executed, and a few U. S. Marines were kept in the country from 1912 to 1925. The Bryan-Chamorro Treaty of 1916 gave the United States an option on a canal route through Nicaragua, and naval bases in the Gulf of Fonseca on the Pacific coast and on Corn Islands on the Atlantic side. Disorder after the 1924 elections brought in U. S. Marines again, but they were withdrawn gradually after the U. S.-supervised elections of 1928, although sporadic fighting continued between government troops and rebel forces under General Augusto Sandino. General Anastasio Somoza was elected president

in Dec., 1936, and took office again on May 21, 1950, after national elections.

**GOVERNMENT AND DEFENSE.** The constitution of 1950 provides for a president popularly elected for six years, and a two-house Congress—a 42-member Chamber of Deputies and a 16-member Senate—both elected for six years. Former presidents of the republic automatically become Senators. There are sixteen regional departments. Military service is voluntary. The Guardia Nacional, both an army and police force, numbers about 3,500. A naval base built at the Pacific port of Corinto by the U. S. during World War II was turned over to Nicaragua in 1946.

**SOCIAL AND ECONOMIC CONDITIONS.** Although primary education is free and compulsory, about 60 per cent of the people are illiterate. There is one university and several vocational schools. In 1951-52 there were 1,261 schools of all kinds with 86,764 students. Western Nicaragua, with about 75 per cent of the population, is inhabited principally by mestizos of Spanish and Indian blood, with some whites and Indians. Negroes and Indians are dominant in eastern Nicaragua.

More than half of Nicaragua is jungle-covered; agriculture, the leading industry, utilizes only 10 per cent of the total land. Coffee (exports 1952-53 season: 340,000 bags of 132 lbs. each) is the chief crop and grows in the western part, which also produces sugar cane, cacao, sesame, beans, rice, tobacco and corn, the chief subsistence crop. Bananas lead in the eastern part, with cotton second. About 900,000 acres are devoted to livestock grazing. Except for some sugar refining, only locally consumed products are manufactured.

Recent foreign trade data are as follows (in millions of U. S. dollars):

	1951	1952	1953
Exports*	48.2	51.3	54.5
Imports	30.0	39.7	43.4

\* Including gold.

Chief exports in 1953 were coffee (39%), gold (16%), cotton (16%) and logs and lumber (8%). The chief customers were the U. S. (44%), Britain (13%) and Germany (10%); leading suppliers, the U. S. (65%), Germany (8%) and the Netherlands Antilles (6%).

Recent public finance data are as follows (in millions of córdobas):

	1951-52	1952-53	1953-54*
Revenue	155.6	198.3	228.0
Expenditure	149.7	191.6	228.0

\* Revised budget estimate.

**NATURAL FEATURES AND RESOURCES; CLIMATE.** Largest but most sparsely populated of the Central American nations, Nicaragua is mountainous in the west, with fertile valleys. A plateau slopes eastward toward the Caribbean.

Two big lakes—Nicaragua, about 100



miles long, and Managua, about 38 miles long—are connected by the Tiptapa River. The Pacific coast is bald and rocky; the Caribbean coast, swampy and indented, is aptly called the "Mosquito Coast."

Gold (exports 1953: 259,061 troy oz.) rivals coffee as the most lucrative export. Exports of silver (1952) were 261,159 troy oz. One-third wooded, Nicaragua produces mahogany, rosewood, cedar, rubber and ipecac root. In 1953 Nicaragua exported 43,778,000 bd. ft. of logs and lumber.

The highlands are generally cool, while the coasts are hot and sultry. The east coast receives up to 100 inches of rain a year. The wet season is generally from May or June through November or December.

## Norway (Kingdom)

### (Norge)

Area: 125,193 square miles.

Population (est. Dec. 31, 1953): 3,375,000 (Norwegian, 98.7%; Swedish, .8%; others, .5%).

Density per square mile: 26.9.

Sovereign: King Haakon VII.

Prime Minister: Oskar Torp.

Principal cities: (est. 1953) Oslo, 444,000 capital, chief port); (census 1950) Bergen, 112,845 (seaport, shipbuilding); Trondheim, 56,669 (seaport, timber, fish); Stavanger, 50,647 (seaport, fisheries).

Monetary unit: Krone.

Language: Norwegian.

Religions: Evangelical Lutheran (state), 96.8%; others, 3.2%.

**HISTORY.** Norwegians, akin to Swedes and Danes, are of Teutonic origin. In the 7th and 8th centuries, Vikings from Norway constantly attacked the British Isles, and in the 9th century many of them settled in what are now Ireland and Normandy. Norway became a united kingdom in 872 under King Harald Haarfager. Christianity was introduced in the 10th century by King Olaf I.

Under the rule of Haakon IV (1217-63), Norway reached a peak of power, ruling the Shetland and Orkney Islands, Iceland, Greenland and the Hebrides. In 1319 Norway and Sweden were united under King Magnus VII, and in 1397 Denmark joined this union under Erik of Pomerania.

In 1450 the triple bond gave way to a union in which Norway was closer to Denmark, but the Treaty of Kiel, in 1814 at the end of the Napoleonic Wars, ceded Norway to Sweden. Norway protested and declared itself independent. Sweden thereupon invaded Norway and forced the issue, requiring Norway to recognize the king of Sweden but leaving Norway its own government, army, navy and customs.

After this union was dissolved in 1905, Prince Karl of Denmark was elected king of Norway by the Storting (parliament)

and ascended the throne as Haakon VII. During World War I, Norway was able to preserve its neutrality, though it suffered greatly from the Allied blockade and from the loss of many merchant ships. In World War II, Norway was invaded by the Germans on April 9, 1940, and resisted for two months before Nazi control was complete. On June 7, King Haakon and the government fled to London and established a government-in-exile.

Meanwhile, in Norway, a new word was born—quisling. It was derived from Major Vidkun Quisling, a Norwegian traitor who collaborated with the Germans and who was Minister President of the German-sponsored occupation government. Quisling eventually was executed by the Norwegians in October, 1945.

King Haakon and the government returned immediately after the German collapse in May, 1945, and an interim coalition cabinet took over, headed by Einar Gerhardsen. The latter's Labor party won a majority in the general elections of Oct. 8, 1945, and an all-Labor cabinet formed on Nov. 5, 1945, led the nation thereafter.

Despite Soviet pressure, Norway adhered to the North Atlantic Pact in April 1949. **RULER.** Haakon VII, born August 3, 1872, second son of Frederick VIII of Denmark, married Princess Maud (born 1869, died 1938), third daughter of Edward VII of England. Their one son—Olaf, Crown Prince, born July 2, 1903—married Princess Märtha of Sweden (born 1901) on March 21, 1929. Their children are Princess Ragnhild Alexandria (born 1930), Princess Astrid (born 1932) and Prince Harald (born 1937). King Haakon is the uncle of Frederick IX of Denmark.

**GOVERNMENT AND DEFENSE.** Norway is a constitutional and hereditary monarchy with succession in the direct male line. The king's executive power is exercised by a council of state, or cabinet, consisting of the prime minister and at least seven other councillors. The 150 members of the Storting are popularly elected for a term of 4 years under proportional representation. When assembled, the Storting divides itself by election into two sections, the Lagting, composed of one-fourth of the members (38) and the Odelsting, composed of the rest. The Storting has a predominant position in the government since the cabinet is responsible to it. Moreover, the king cannot dissolve it before the expiration of its term. There is universal suffrage for all citizens, male or female, over 23. Party representation in the Storting (elections of Oct. 12, 1953) is Labor 77; Conservative 27; Liberal 15; Agrarian 14; Christian People's 14; Communist 3.

The department of defense serves as a coordinating body for the army, navy and air force. The army is a national militia



with compulsory service from 18 to 55. Army strength in 1951 was about 15,000. The navy on Dec. 31, 1953, had 5 fleet destroyers, 8 submarines, 14 frigates and escort vessels and other minor ships.

**SOCIAL AND ECONOMIC CONDITIONS.** Education is compulsory and free from 7 to 14. Illiteracy is almost unknown. In 1948-49, elementary schools had enrollment of 300,174, and secondary schools had 39,921. There are 2 universities—Oslo (4,682 students in 1950) and Bergen (756).

Land suitable for cultivation, estimated at less than 5 per cent of the total area, consists of strips in the deep narrow valleys and around fiords and lakes. Food-stuff production is insufficient to meet domestic needs. Leading crops, with 1953 production in metric tons, are wheat, 39,000; barley, 217,000; oats, 183,000; potatoes, 1,265,000; hay and fodder. The country is more adapted to stock raising than to crop growing; in 1953 there were 1,150,035 cattle, 1,985,284 sheep, 379,035 hogs and 119,092 goats.

Raw materials produced in Norway form the basis of most of the manufactures. Leading industries are food, machinery, metals, wood, paper and electro-chemicals. On Mar. 31, 1954, 54 vessels of 197,626 gross tons were under construction in Norwegian yards.

Statistics of foreign trade are as follows, in millions of kroner:

	1951	1952	1953
Exports	4,427	4,039	3,633
Imports	6,270	6,239	6,514

In 1953 the leading suppliers were Britain (21%), western Germany (16%), Sweden (13%) and the U. S. (8%). Leading customers were Britain (19%), the U. S. (11%), Sweden (9%) and western Germany (9%). Chief exports were fish (15%), wood pulp (13%) and paper (10%).

The normally adverse trade balance is offset to some extent by invisible exports, particularly the earnings of the large merchant marine.

Norway is one of the greatest seafaring nations, and its merchant marine of 2,218 vessels (100 tons and over) of 6,262,700 gross tons (June 30, 1953) is the third largest in the world. War-time losses amounting to 2,393,000 tons were the third highest among the United Nations. The long coast line and the difficulties of inland transportation make coastal shipping especially important. In 1950 there were 2,776 miles of railway and 27,500 miles of highway.

The 1954-55 budget was balanced at 4,341,000,000 kr. The public debt on Dec. 31, 1953, was 5,517,000,000 kr.

**NATURAL FEATURES AND RESOURCES; CLIMATE.** Nearly 70 per cent of Norway is uninhabitable and covered by mountains, glaciers, moors and rivers. Its extreme length from the Skagerrak to North Cape—

Europe's most northerly point, far above the Arctic Circle—is about 1,100 miles. Breadth averages 60 miles, with a maximum of 260. The hundreds of deep fiords that cut into Norway's coast line give it an over-all ocean front of more than 12,000 miles. Islands off the coast, numbering almost 150,000, form a breakwater and make a safe coastal shipping channel. The Lofoten and Vesterålen Islands, off the northwest coast, have an area of about 1,560 square miles.

Mineral resources are extensive, but coal deposits are entirely lacking except in Spitsbergen. The most important minerals (1953 production in metric tons) are iron ore, 1,184,000; aluminum, 55,324; pyrite ore, 740,200; zinc, 38,724; and copper ore, molybdenum ore, tungsten, antimony ore, tin and silver.

Cheap electric power, produced mainly by hydroelectrical plants (average monthly production 1952: 1,534,000,000 kwh), makes possible the extraction of nitrogen from the air and manufacture of potassium nitrate, an important fertilizer.

The forests, largely in the south and southeast, are one of the chief natural resources. About 25 per cent of the total area is covered with forests, of which 70 per cent is pine. Timber production in the 1952-53 season was about 6,500,000 cu.m. Production of newsprint in 1952 was 157,758 metric tons; other paper, 247,317 tons. In 1953, 544,036 tons of chemical pulp and 526,955 tons of mechanical pulp were produced.

Fishing is one of the principal industries, engaging as many as 100,000 persons annually. A large number of the best European food fisheries are situated along the coast. The 1953 catch totaled 1,377,569 metric tons valued at 465,921,000 kr. Norwegians are the world's leading whalers and were the first to develop pelagic (open sea) whaling. Whale-oil production in the 1952-53 season was 132,667 long tons.

The Gulf Stream affects the climate mildly. Summer temperatures range from about 50° in the extreme north to 60.6° at Oslo in July. February temperatures in Oslo average 24°, against 11° to -12° in the north. Norway is one of the lands of the midnight sun; in the extreme north for many weeks in the summer the sun never sets, and for an equal time in the winter the sun does not rise. Rainfall is heavy on the coast (up to 100 inches or more annually) but decreases sharply inland.

## OUTLYING TERRITORIES

### SPITSBERGEN (SVALBARD).

This arctic archipelago, with an area of approximately 25,000 square miles, lies about 400 miles north of Norway and consists of West Spitsbergen (15,200 sq. mi.), North-East Land (about 6,000 sq. mi.), Edge Island (2,500 sq. mi.), Barents Island

(580 sq. mi.), and several small islands including Bear Island. The group was probably discovered by Norwegians in A.D. 1194 and rediscovered by the Dutch navigator Barents in 1596. The question of sovereignty was long unsolved. By a treaty signed with the disputing nations on Feb. 9, 1920, however, Norwegian sovereignty was recognized, and Norway declared the area a part of the kingdom Aug. 14, 1925. Spitsbergen was occupied by Allied forces in the summer of 1941. Soviet proposals for establishment of joint military bases were rejected by Norway in Feb., 1947.

In the 18th and 19th centuries, Spitsbergen was a whaling center, but now the only important product is coal (1953: 426,495 metric tons). Population (1949), largely miners, none indigenous: 3,950.

#### JAN MAYEN ISLAND.

This arctic island (144 sq. mi.), lying between Greenland and the north of Norway, was discovered by Henry Hudson in 1607. It was annexed to Norway May 8, 1929. A Norwegian weather station was established in 1921, and during World War II a U. S. Navy weather station was maintained on the island. It is otherwise uninhabited.

**OTHER TERRITORIES.** Norway also exercises sovereignty over Bouvet Island (22 sq. mi.) in the South Atlantic, Peter I Island (94 sq. mi.) in the Antarctic Ocean, and that part of the Antarctic continent lying between 20 degrees and 45 degrees east. All are uninhabited.

**Outer Mongolia.** See **Mongolian People's Republic**

**Palestine.** See **Israel; Jordan**

### **Panamá (Republic)** (República de Panamá)

**Area:** 28,575 square miles.

**Population** (est. July 1, 1954): 887,400 (1940: mestizo, 65.34%; Negro, 13.31%; white, 11.07%; Indian, 9.53%; others, .75%).

**Density per square mile:** 31.1.

**President:** José Antonio Remón.

**Principal cities** (census 1950): Panamá City, 127,874 (capital and chief port); Colón, 52,204 (chief Caribbean port); Ciudad David, 14,847 (bananas).

**Monetary unit:** Balboa.

**Language:** Spanish (official).

**Religion:** Roman Catholic, 93%; Protestant, 6%; others, 1%.

**HISTORY.** Visited by Columbus in 1502 on his fourth voyage and explored by Balboa in 1513, Panamá was the principal transshipment point for Spanish treasure and supplies to and from South and Cen-

tral America in colonial days. In 1821, when Central America revolted against Spain, Panamá joined Colombia, which already had declared its independence. For the next 82 years, Panamá attempted unsuccessfully to break away from Colombia. After U. S. proposals for canal rights over the narrow isthmus had been rejected by the Colombian Senate, Panamá proclaimed its independence with U. S. backing in 1903. U. S. Marines restrained Colombian intervention on the ground that the U. S.-Colombian treaty of 1846 gave the United States the right to keep the isthmus open.

For canal rights in perpetuity, the United States paid Panamá \$10,000,000, and agreed to pay \$250,000 (\$430,000 after devaluation of the U. S. dollar in 1933) each year. In exchange, the United States got the Canal Zone, a ten-mile-wide strip across the isthmus, and a considerable degree of influence in Panamanian affairs.

During World War II the U. S. was granted the right to establish a number of bases in Panamá. All were evacuated in 1948 after the Assembly rejected a 10-year lease agreement on Dec. 22, 1947.

**GOVERNMENT.** Under the 1946 constitution, the Assembly and the president are elected for 4-year terms, with the president ineligible to succeed himself. Panamá has no army or navy, but has a national police corps numbering 2,000.

**SOCIAL AND ECONOMIC CONDITIONS.** Although education is free and compulsory between 7 and 15, 28.3% of the population 10 years of age and over (excluding tribal Indians) could not read and write in 1950. In the year 1951-52, there were 943 public and private primary schools with 114,023 students and 74 public and private secondary schools with 19,417 students; the national university at Panamá City had 1,728 students.

About five-eighths of the nation is unoccupied. A fourth of the population is in Colón and in Panamá City, the oldest white settlement on the Pacific coast of the Americas. In the cities, the lower classes are Negro and Negroid, descendants of British West Indian laborers on the canal. Once literally a pest hole from coast to coast, Panamá has been made into one of the healthiest of the tropical nations through U. S. sanitation methods introduced by Canal Zone officials.

Bananas are the main agricultural crop; others are cacao, tobacco, abacá, rubber, rice, coffee and sugar cane, all of which are exported, as are cattle, hides and gold. Imports in 1953 were \$69,995,698; domestic exports, \$14,682,454. Chief exports were bananas (54%) and cacao (8%). Leading customers were the U. S. (91%), El Salvador and Costa Rica; leading suppliers, U. S. (65%), Canal Zone, Britain.



The Panama Canal is the country's biggest economic asset. About a third of the national income is ordinarily derived from the wages of Panamanians working in the Canal Zone, or from cash spent by U. S. personnel in the Zone.

The main railway is the U. S. Government-owned Panamá Railroad, 47.64 miles long, bridging the isthmus from Panamá City to Colón. In recent years many foreign ships have been registered in Panamá to escape high labor costs and governmental regulations in other nations; in 1953, the merchant marine consisted of 593 vessels (100 tons and over) of 3,906,901 gross tons, one of the largest in the world.

**NATURAL FEATURES; CLIMATE.** Panamá, roughly the size of South Carolina, runs east to west for 420 miles from Costa Rica to Colombia, and has a maximum width of 113 miles, with 477 miles of Caribbean coast and 767 on the Pacific. At the narrowest and lowest point, the canal bisects the country. Outlying islands number about 630 in the Caribbean and 116 in the Pacific. Panamá steps up from coastal lowlands, with extremely heavy rainfall (150 inches or more), to upland valleys and plateaus covered by dense forest and a few mountain peaks, some volcanic, near the Costa Rican border.

## Paraguay (Republic) (República del Paraguay)

Area: 154,165 square miles.

Population (est. 1952): 1,464,000 (Paraguayan, 97%; Indian, 3%).

Density per square mile: 9.5.

President: Gen. Alfredo Stroessner.

Principal cities (census 1950\*): Asunción, 204,085 (capital); Encarnación, 40,906 (rail terminus); Concepción, 29,650 (port, Paraguay River); Villarrica, 26,527 (sugar, tobacco).

Monetary unit: Guaraní.

Languages: Spanish (official), Guaraní.

Religion: Roman Catholic (official).

\* Preliminary figures.

**HISTORY.** Paraguay, a landlocked South American country with a good river outlet to the South Atlantic, is about the size of Montana and, more often than not, is under the rule of a dictator-president.

In 1526 and again in 1529, Sebastian Cabot explored the area when he sailed up the Paraná and Paraguay Rivers. Domingo Martínez de Irala, a Spaniard, founded Asunción in 1537 and became the dominant figure in Paraguay for the next two decades. From 1608 until their expulsion from the Spanish dominions in 1767, the Jesuits maintained an extensive establishment in the south and east of Paraguay. In 1811 Paraguay revolted against Spanish rule and became a nominal republic under two consuls, one of whom, Dr. José Rodríguez Francia, ruled as absolute dictator until

his death in 1840. His dictator successor, Carlos Antonio López, was succeeded in 1862 by his son, Francisco Solano López, under whose leadership Paraguay lost a good part of its population in a disastrous five-year war with Argentina, Brazil and Uruguay.

Paraguay remained neutral in World War I. Economic and financial exhaustion resulted from the war with Bolivia (1932-35), after which Paraguay was awarded three-fourths of the disputed Gran Chaco region (1938).

Juan Natalicio González, elected president in the Feb. 1948 elections, took office Aug. 15, but successive revolts on Jan. 30 and Feb. 26, 1949, ousted him and his successor. The leader of the latter revolt, Felipe Molas López, was elected president on Apr. 17, but gave way to Federico Chaves on Sept. 11, 1949. Chaves was re-elected Feb. 15, 1953, but he was ousted by the army on May 5, 1954, and on July 11 Gen. Alfredo Stroessner was elected to complete his term.

**GOVERNMENT AND DEFENSE.** Since adoption of the 1940 constitution, Paraguay has been a semi-authoritarian republic which elects a president every five years by popular vote, and a one-house Congress on a population basis. There is also a Council of State, somewhat equivalent to an upper house, its members named by the government. The presidentially-appointed cabinet administers the government and is required merely to inform the Congress and Council of its policy.

The army numbers approximately 6,000. Military service is compulsory for two years. For patrolling the Paraguay River, the country's life line, there is a navy of about 1,400 men with four gunboats.

**SOCIAL AND ECONOMIC CONDITIONS.** The illiteracy rate is unofficially estimated at 60 per cent, one of the highest in South America. Education is free and supposedly compulsory. In 1950 there were 203,607 pupils attending 1,496 elementary schools. The University of Paraguay at Asunción had 1,800 students in 1950, and there are several normal and agricultural schools.

The Paraguayans are a homogeneous blend of Spanish, Portuguese and Italian, with considerable Guaraní Indian blood. There are almost no Negroes; the 35,000 to 50,000 uncivilized Indians live mainly in the Chaco. The country is 90 per cent bilingual, with Guaraní dominating over Spanish (the official language) in rural areas.

A well-favored land, Paraguay is predominantly a cattle country, keeping about 4,000,000 head. The soil is fertile and the climate suitable for subtropical crops. The chief cash crop is cotton (acreage: 150,000; 1951 ginned output: 14,000 metric tons); the staple food crop is manioc. Other crops are rice, maize, yerba maté, tobacco, sugar, peanuts and fruits. Oil of petit-grain, an



important perfume ingredient, is extracted from the leaves of the bitter orange.

Exports in 1952 were valued at \$31,290,000 and imports at \$30,660,000. Chief exports were cotton (34%), quebracho extract (18%) and timber (16%). The U. S., Argentina and Uruguay were the principal customers; the U. S., western Germany and Argentina were leading suppliers.

Railway mileage is about 715. In 1952 there were some 600 miles of modern highways. Domestic air service is furnished by the nationalized Línea Aérea de Transporte Nacional (LATN). Several foreign lines supply international service.

**NATURAL FEATURES AND RESOURCES; CLIMATE.** Eastern Paraguay, between the Paraná and Paraguay Rivers, is upland country with the thickest population settled on the grassy slope that inclines toward the Paraguay River. The greater part of the Chaco region, to the west, is covered with marshes, lagoons, dense tropical forest and jungle.

Forest resources are considerable, especially in the Chaco. Quebracho—the "Axe-breaker," a wood so heavy that it will not float—is the principal commercial tree. The wood has many uses, from paving blocks to ox-cart wheels. Quebracho tannic extract (production 1952: 28,197 metric tons) is the chief product. Its export is limited by agreement with Argentina, also a heavy producer.

In the east, temperature averages about 81° in summer (December–February) and 64° in winter (May–August). From Asunción, with an annual average greater than 60 inches, the rainfall decreases in the west.

## Peru (Republic) (República del Perú)

Area: 482,133 square miles.

Population (est. 1953): 9,035,000 (white, and mestizo, 53%; Indian, 46%; Asiatic, Negro and others, 1%).

Density per square mile: 18.7.

President: Manuel A. Odría.

Principal cities (est. Dec. 31, 1952): Lima, 926,400 (capital); Callao, 104,500 (port of Lima); Arequipa, 100,900 (commercial center); Cuzco, 58,200 (ancient Incan capital); Trujillo, 49,600 (mining).

Monetary unit: Sol.

Languages: Spanish, Quéchua, Aymará (Indian).

Religion: Roman Catholic.

**HISTORY.** Peru, once part of the great Incan empire and later the major viceroyalty of Spanish South America, is more than three times the size of California. It was conquered in 1531–33 by Francisco Pizarro. On July 28, 1821, Peru proclaimed its independence, but the Spanish were not finally defeated until the Battle of Ayacucho on Dec. 9, 1824. For a hundred years

thereafter the Peruvian course was rough. Revolutions were frequent, and a new war was fought with Spain in 1864–66. The dispute with Chile over Tacna and Arica was not finally settled until 1929.

Peru emerged from 20 years of dictatorship on July 28, 1945, with the inauguration of President José Luis Bustamante y Rivero after the first free election in many years. However, the change to a regime in which political prisoners were freed and the press was free to criticize was soon tempered by factional troubles within the government. As a result, in a cabinet reorganization of Jan. 12, 1947, three members of the leftist APRA party, which had contributed largely to Bustamante's election, were eliminated. The rightist-APRA cleavage came to a head on Oct. 28, 1948, when an army-led rightist revolt headed by Gen. Manuel A. Odría ousted Bustamante. Odría became provisional president on Oct. 31. He was unopposed in presidential elections held July 2, 1950.

**GOVERNMENT AND DEFENSE.** Under the 1933 constitution, Peru elects by popular vote every six years a president, two vice-presidents and a bicameral Congress—a Senate of 47 members and a Chamber of 156 members. The president is ineligible to succeed himself. The cabinet, headed by the prime minister, is presidentially appointed.

Military service is compulsory at the age of eighteen. The army had about 32,000 men in 1950. The 1953 navy had 2 old cruisers, 1 destroyer, 4 submarines, 6 frigates and escort craft and smaller units. There are about 10,000 police and civil guards.

**SOCIAL AND ECONOMIC CONDITIONS.** Peru, once the cultural center of Spanish South America, has an illiteracy rate of over 50 per cent. Education between 7 and 14 is free, compulsory and state-controlled. Primary schools numbered 10,333 in 1951 and enrolled 958,128 pupils; 98 state secondary schools had 41,209 students and 148 private secondary schools, some run by religious orders, had 21,023. Five universities had 14,120 students in 1950, including the University of San Marcos, founded in 1551 (oldest in America) with 9,418.

Most Peruvians are of mixed Spanish and Indian blood. The Indians come from three main stocks—Quéchua, Aymará (Colla) and Chunchu. There is a relatively large Asiatic population.

Land under cultivation is estimated at only slightly more than 10 per cent of the total area, with more than 80 per cent of the population being dependent upon agriculture. About one-eighth of the cultivated area in the irrigated coastal valleys of the central region is devoted to cotton, the most important crop (1953 production: 92,000 metric tons). Sugar (1953: 625,-

000 tons), rice, tobacco and coffee are exported, while wheat, corn, potatoes, beans, barley and quinoa (a grain similar to millet) are subsistence crops. Stock-raising, pursued in the Pacific highlands and the elevated parts of the Amazon slope, supplies most of the country's meat needs, as well as wool, hides and skins for export. Llamas, used as beasts of burden, and vicuñas and alpacas, noted for their wool, are native to Peru. Livestock estimates in Dec. 1952 showed 3,189,000 cattle; (1951) 1,203,000 hogs, 16,298,000 sheep and 3,300,000 alpacas and llamas.

Industrialization has been slow. Aside from the copper smelters and oil refineries, the greatest progress has been made in the textile industry, which obtains its raw materials from domestic cotton and wool and from imported silk.

Foreign trade statistics, in millions of soles, are as follows:

	1951	1952	1953
Exports	3,811.6	3,686.5	3,752.2
Imports	4,241.7	4,473.4	4,970.6

Chief exports in 1952 were cotton (33%), sugar (14%) and petroleum and products (7%). Chief suppliers were the U. S. (56%) and Britain (11%); chief customers, the U. S. (28%), Chile (18%) and Britain (8%). Principal imports are machinery and motor vehicles, foodstuffs (especially wheat), iron and steel manufactures, electrical goods and chemicals.

Highway mileage in 1951 totaled 19,500, of which more than a third is hard-surfaced; the Pan-American highway had a total Peruvian length of 1,818 miles. Railway mileage (1951) was 2,800, much of it over difficult territory. Several airlines supply domestic and international service.

**NATURAL FEATURES AND RESOURCES; CLIMATE.** The Andes Mountains divide Peru into three sharply differentiated zones. To the west is the coastland, much of it arid, extending for 50 to 100 miles inland, and 1,400 miles long.

The mountain area, with peaks over 20,000 feet high, lofty plateaus and deep valleys, lies centrally. Beyond the mountains to the east is the heavily forested slope leading to the Amazonian plains.

Peru has vast mineral resources. It ranks fifth in world silver production and mines about 25 per cent of the world's vanadium. But mining is second to agriculture, and nearly all of it is in the hands of foreign capital. Petroleum and copper are the most important, with the latter controlled by the American-owned Cerro de Pasco Corporation, which also accounts for much of the gold and silver output. In 1953 gold production was 128,211 oz.; silver, 19,216,409 oz.; copper (smelter), 25,803 short tons; lead, 66,520 tons; zinc (in ore),

147,850 tons; vanadium (1952), 495 tons. Petroleum production in 1953 was 15,875,000 barrels; discovery of rich new deposits has been reported.

Forest products include rubber (1952: 3,500 metric tons), balata, raw quinine, vegetable ivory, mahogany, cedar, dye woods and coca, the source of cocaine. An important industry on the outlying islands is the gathering of guano (bird excrement), a valuable fertilizer used almost entirely domestically.

The climate ranges from tropical in the eastern lowlands to arctic among the snow-capped peaks. The coastal area has an average annual rainfall of less than 2 inches and temperatures ranging between 55° and 98°. Temperatures range from 75° to 95° in the humid Montaña, and rainfall between 75 and 125 inches annually.

## The Philippines (Republic)

Area: 114,400 square miles.  
Population (est. July 1, 1954): 21,440,200 (Filipino, except [1948] 121,702 Chinese, 6,955 Americans, 1,886 Spanish and 3,319 others).

Density per square mile: 187.4.  
President: Ramón Magsaysay.  
Principal cities (est. 1952): Manila, 1,158,260 (seat of government, chief port); Cebu, 175,950 (seaport); Quezon City, 159,730 (legal, future capital); Basilan, 141,640 (lumber); Bacolod 126,200 (sugar); Zamboanga, 124,710 (seaport).

Monetary unit: Peso.  
Languages: English, Tagalog, Bisayan, Spanish, Ilocano, Bicol.

Religions (census 1948): Roman Catholic, 82.9%; Aglipayan (Independent Philippine Catholic), 7.6%; Mohammedan, 4.1%; Protestant, 2.3%; others and no religion, 3.1%.

**HISTORY.** Fernando Magellan, the Portuguese navigator in the service of Spain, discovered the Philippines on March 16, 1521, and 21 years later a Spanish exploration party named the group of islands in honor of Prince Philip, later Philip II of Spain. Spain retained possession of the islands for the next 350 years.

The Philippines were ceded to the United States in 1899 by the Treaty of Paris after the Spanish-American War. Meanwhile the Filipinos, led by Emilio Aguinaldo, had declared their independence. They continued guerrilla warfare against U. S. troops until the capture of Aguinaldo in March, 1901. By July, 1902, peace was established in all parts of the islands except those inhabited by Moros.

The first U. S. civilian governor-general was William Howard Taft (1901-04). The Jones Law (1916) provided for the establishment of a Philippine legislature composed of an elective Senate and House of Representatives. The Tydings-McDuffie Act (1934) provided for complete Philippine



independence in 1946. Under a constitution approved by the people of the Philippines May 14, 1935, the Commonwealth of the Philippines was inaugurated on Nov. 15 under the presidency of Manuel Quezon y Molina, who was re-elected in 1941.

The Philippines were invaded by Japanese troops on Dec. 8, 1941 (Philippine time), and after the fall of Bataan and Corregidor, President Quezon and his government fled to Washington. The Japanese-sponsored "Philippine Republic" received little support from most Filipinos. U. S. forces led by Gen. Douglas MacArthur re-invaded the islands in Oct., 1944, and after the liberation of Manila (Feb., 1945), Sergio Osmeña, who had succeeded to the presidency on the death of Quezon (Aug. 1, 1944), re-established the government.

Brig. Gen. Manuel A. Roxas y Acuña, who defeated Osmeña in the elections of April, 1946, became first head of the new independent republic, which came into existence on July 4, 1946, as scheduled in the Tydings-McDuffie Act. He died April 15, 1948, and was succeeded by the Vice President, Elpidio Quirino. The latter was re-elected on Nov. 8, 1949, but lost a second bid for re-election to Ramón Magsaysay, who took office on Dec. 30, 1953.

**GOVERNMENT AND DEFENSE.** Under the constitution of 1935 (as amended in 1940), the Philippines have a republican form of government based on that of the United States. Executive power is exercised by the president, popularly elected for a 4-year term and assisted by a cabinet appointed by him. The popularly elected Congress has two houses—the Senate with 24 members and the House of Representatives with 102 members.

Party standing in the House of Representatives (elections of Nov. 10, 1953) was as follows: Nacionalistas 57; Liberals 34; Democratic-Nacionalistas 7; Democrats 3; Independent 1.

The Philippine army has been reorganized and re-equipped with U. S. assistance. An agreement signed March 14, 1947, provided for the establishment, for a 99-year period, of 23 U. S. military, naval and air bases in the islands. Army strength was about 55,000 in 1953. A mutual defense treaty with the U. S. was signed Aug. 30, 1951.

**SOCIAL AND ECONOMIC CONDITIONS.** *Education.* Education is free. The illiteracy rate (10 years and over) was 30% in 1952. In 1950-51 there were 4,113,870 pupils in the 22,077 public schools. There were 90 institutions of higher learning, including the state-supported University of the Philippines. Tagalog is the national language but English and Spanish are used throughout the country.

*Agriculture and Industry.* Agriculture is the chief industry. Average size of the

farms is 10 acres, but there are many large plantations. Rice (palay) is the staple native food cereal, but production (3,144,000 metric tons in 1953) is insufficient to meet home consumption. The Philippines normally produce about half the world copra supply and a large proportion of the abacá (Manila hemp) supply; they are also a leading source of sugar (1952-53: 1,027,317 metric tons) and sugar products, normally the chief export. Other crops include sisal, kapok, cotton, corn, tobacco, coffee, rubber, cacao, citrus fruits and bananas. In the crop year 1952-53, 816,300 metric tons of copra, 22,430 tons of tobacco and 112,660 tons of abacá were produced. Livestock on Jan. 1, 1953, included 2,510,110 carabaos, the farmers' all-purpose animal, 762,290 cattle, 219,330 horses and 4,793,620 hogs.

There are no large industrial establishments and activity is limited primarily to the processing of agricultural and forest products, such as sugar cane, coconuts, tobacco, abacá and timber. Preparation of fine embroideries is an important industry.

*Foreign Trade.* Statistics of trade, in millions of pesos, are as follows:

	1951	1952	1953
Exports	831.4	704.8	801.2
Imports	959.0	852.2	894.7

In 1953 the chief exports were copra (29%), sugar (24%), abacá (10%) and base metals and concentrates (9%). Leading customers were the U. S. (67%) and Japan (12%); leading suppliers, the U. S. (78%) and Japan (5%). Leading imports were machinery and vehicles (14%), cotton and manufactures (13%), iron and steel and manufactures, and petroleum and products.

*Finance.* Recent data are as follows (in millions of pesos):

	1952-53	1953-54*	1954-55†
Revenue	540.7	559.6	668.5
Expenditure	559.6	639.6	668.3

\* Revised budget estimate. † Initial budget estimate.

The total public debt on Nov. 30, 1953, including provincial and municipal obligations guaranteed or assumed by the national government, totaled 954,432,408 pesos.

*Communication.* The inter-island trade—extremely important because of the make-up of the archipelago—is served by vessels licensed for domestic, coastwise and bay and river traffic. The port of Manila has ample facilities for ocean-going vessels. According to *Lloyd's Register*, the merchant marine had 100 vessels (100 tons and over) of 153,707 gross tons on June 30, 1953.

Railway mileage (1949) totaled 613, most of which (540 mi.) was on Luzon. Highways totaled 16,300 mi. that year. Air trans-



portation has assumed an important place in inter-island communication.

**NATURAL FEATURES AND RESOURCES; CLIMATE.** The Philippines are an archipelago of approximately 7,083 islands lying about 500 miles off the southeast coast of Asia. The northernmost island, Y'Ami, is 65 miles from Formosa, while the southernmost, Saluag, is 30 miles east of Borneo. Only 466 of the islands have an area of more than one square mile, and only 2,441 have names. The largest islands are Luzon in the north (40,814 sq. mi.), Mindanao in the south (36,906 sq. mi.), Samar (5,124 sq. mi.), Negros (4,903 sq. mi.), and Palawan (4,500 sq. mi.).

**Minerals, Forests and Fisheries.** The Philippines possess large but relatively undeveloped mineral resources. Most important are gold, silver, iron ore, copper ore, chromite, manganese ore, lead and zinc. Petroleum formations are also known to exist. In 1953, 480,625 ounces of gold, 572,046 ounces of silver, 12,715 metric tons of copper concentrates, 557,090 tons of chromite, 1,217,864 tons of iron ore, 154,905 tons of coal, 21,508 tons of manganese and 2,434 tons of lead were mined.

The forest area is estimated at more than 43,700,000 acres (about 58 per cent of the total area), not including 3,200,000 acres covered with cogón grass, fit for grazing. About 97.5 per cent of the total forest area is government-owned. Lumber production totaled 429,139,547 bd. ft. in the fiscal year 1952-53; timber, 2,844,590 cu.m.

**Climate.** The temperature is warm throughout the year, averaging 80°, with only slight variations. Rainfall averages about 90-100 inches annually, with the wettest season occurring from June or July through October. Typhoons, often causing severe damage, originate in the Pacific and strike the islands from the east and southeast before curving north.

## Poland (People's Republic)

(Rzeczpospolita Polska)

Area: 119,703 square miles.

Population (est. 1953): 26,200,000.

Density per square mile: 218.9.

Chairman of State Council: Aleksander Zawadzki.

Premier: Josef Cyrankiewicz.

Principal cities (census 1950): Warsaw, 650,064 (capital); Łódź, 619,914 (industrial center); Kraków, 330,946 (commercial center); Poznań, 320,294 (farm products); Wrocław (Breslau), 289,734 (former German industrial center).

Monetary unit: Złoty.

Language: Polish (more than 90%).

Religions: Roman Catholic, Jewish, Protestant.

**HISTORY.** Little of certainty is known about Polish history before the 11th cen-

tury. Early in that century the Polish king, Boleslaus I (the Brave), ruled over Bohemia, Saxony and Moravia. Mongol invasions in 1241 and 1259 were repelled with accompanying devastation. Meanwhile, the Teutonic Knights were erecting in Prussia a state which included part of Poland and barred the latter's access to the Baltic. The Knights were defeated by Wladislaus II (1386-1434) at Tannenberg in 1410 and became Polish vassals under the Peace of Thorn (1466), by which Poland regained a Baltic shoreline.

Poland reached the peak of its power between the 14th and 16th centuries. The 16th century was marked by a constant growth of power on the part of the lesser nobility with a corresponding weakening of the Crown, which became elective in 1572. In succeeding years, Poles scored many military successes against the Russians and Turks. In 1683, King John Sobieski, a famous military leader, turned back the Turkish tide near Vienna.

These successes did not halt the process of decline which resulted from the lack of strong central authority, and Prussia, Russia and Austria were able to carry out a first partition of the country in 1772, a second in 1792 and a third in 1795-96. For more than a century thereafter, there was no Polish state, but the Poles never ceased their efforts to regain their independence. World War I found them fighting unhappily on both sides.

The independence of Poland was formally proclaimed in Nov., 1918, and Marshal Josef Pilsudski was confirmed in office as President. In 1919, Ignace Paderewski, famous pianist and patriot, became the first premier. Russia attacked Poland in 1920 but the Poles, under Marshal Pilsudski and aided by the French, defeated the invaders. On May 12, 1926, Marshal Pilsudski seized complete power in a coup d'état and ruled the country dictatorially until his death on May 12, 1935, when he was succeeded by Marshal Edward Smigly-Rydz.

Despite a 10-year non-aggression pact signed with Germany in 1934, Hitler attacked Poland on Sept. 1, 1939. Russian troops invaded from the east Sept. 17, 1939, and on Sept. 28 a German-Russian agreement was signed dividing Poland between Russia and Germany. Before leaving Poland, President Ignacy Moscicki resigned, designating as his successor W. Raczekiewicz; the latter formed a government-in-exile in France with Gen. Wladyslaw Sikorski as premier; this government moved to London after France's defeat in 1940. All of Poland was occupied by Germany after the Nazi attack on the Soviet Union in June, 1941. On July 30, 1941, Poland concluded an agreement with the U.S.S.R. voiding all German-Soviet agreements effected after Sept. 1, 1939.

The legal Polish government soon fell out with the Russians, however, and in July, 1944, a Communist-dominated Polish Committee of National Liberation received Soviet recognition. Moving to Lublin after that city's liberation, it proclaimed itself the Provisional Government of Poland on Dec. 31, 1944. After almost six months' negotiations, some of the former members of the Polish Government in London joined with the Lublin government to form the Polish Government of National Unity on June 28, 1945. Great Britain and the U. S. recognized this government on July 5, 1945, and withdrew recognition from the London government.

On Aug. 2, 1945, in Berlin, Prime Minister Attlee, President Truman and Generalissimo Stalin established a new *de facto* western frontier for Poland, along the rivers Oder and Lausitzer Neisse, pending a final peace treaty. On Aug. 16 the Soviet Union and Poland signed a treaty delimiting the Soviet-Polish frontier. Under these agreements Poland was shifted westward. In the east it lost 69,860 square miles with 10,772,000 inhabitants; in the west it gained (subject to final peace conference approval) 38,986 square miles with a pre-war population of 8,621,000.

Democratic participation was negligible in the new government, which had adhered strictly to Soviet foreign policy and pursued a program of internal socialization. The government bloc controlled by the small Communist minority won a sweeping victory in the Jan., 1947, elections, which gave little opportunity to the opposition for campaigning or voting. The Communist and Socialist parties were merged in Dec. 1948. All candidates in elections held Oct. 26, 1952, belonged to the Communist-controlled National Front. In Nov. 1952, Aleksander Zawadzki was elected chairman of the state council under the new constitution, and former president Boleslaw Bierut was elected premier. On March 19, 1954, he yielded to Josef Cyrankiewicz, who was premier from 1947 to 1952, and became first secretary of the Polish Communist Party.

**GOVERNMENT AND DEFENSE.** The 1952 constitution is based on that of the U.S.S.R. The supreme organ of state authority is the Sejm, composed of 425 members elected for 4 years by all citizens over 18. It elects a state council to act when it is not in session and also elects the council of ministers, headed by the premier, which is the supreme executive and administrative organ.

Poland's army in 1953 numbered about 600,000, including security and frontier defense forces. The navy in 1952 had 2 destroyers, 4 submarines and some minesweepers and coastal craft.

## SOCIAL AND ECONOMIC CONDITIONS.

**Education.** In 1951-52 there were 22,980 primary schools with 3,300,000 pupils. Secondary schools numbered 821 with 325,000 pupils. The 83 institutions of higher learning, including 8 universities, had 142,000 students. Education is free and compulsory up to 18.

**Agriculture.** Poland remains essentially an agricultural country: the areas now under *de facto* Polish administration in the west accounted for 25 per cent of Germany's pre-war food production. Farm lands lost to the Soviet Union were considerably larger in area than those gained from Germany, however.

Agricultural production figures in 1951, in metric tons, included wheat, 2,280,000; sugar beets, 6,900,000; (1950) rye, 6,502,000; oats, 2,126,000; potatoes, 36,835,000. In Dec. 1950, there were 2,797,000 horses, 7,164,000 cattle, 9,928,000 hogs and 2,194,000 sheep.

**Industry.** Industrial facilities, although severely damaged during World War II, were not greatly affected by territorial concessions to the U.S.S.R., with the exception of the Lwów area. On the other hand, important German industrial areas, especially Silesia and the city of Stettin, are located in the territories under *de facto* Polish administration. As a result, post-war Poland has a much larger industrial potential. Almost all industries have been nationalized or placed under state control, and a planned economy has been introduced as part of the government's drive to make Poland an industrial nation. Production of crude steel was about 4,000,000 short tons in 1953.

**Trade.** Foreign trade is largely conducted by government bodies under the terms of numerous trade agreements with other nations. In 1950 exports totaled \$631,000,000; imports, \$844,000,000. In 1952 the Soviet share in Polish foreign trade was 32%; that of Soviet satellites or allies, including eastern Germany and China, 35%; that of the free world, 33%.

Poland stopped publishing detailed data on foreign trade in 1949. Exports in 1949 were unofficially reported to be divided as follows: coal and coke (46%), other raw materials and semimanufactures (18%), and agricultural products (mainly bacon and ham) and consumer's goods (20%). Major imports were machinery, textiles, chemicals and mineral products.

**Finance.** The 1953 budget estimated revenue at 101,100,000,000 zlotys and expenditure at 97,100,000,000 zlotys.

**Communications.** The merchant marine had 140 vessels (100 tons and over) of 281,621 gross tons on June 30, 1953. The principal ports are Gdynia, with one of the largest harbors in Europe, Gdansk



(Danzig) and the former German port of Stettin. There are about 61,000 miles of public highway, 4,800 miles of inland waterways and 15,500 miles of railway.

#### NATURAL FEATURES AND RESOURCES;

**CLIMATE.** Most of Poland is a plain with no natural boundaries except the Carpathian Mountains on the south and the Oder and Neisse Rivers on the west. The central Polish plain, 300 to 450 feet above sea level and intersected by great rivers, lies south of the flat country along the Baltic shore.

The acquisition of large coal deposits in German Silesia (estimated at more than 5,000,000,000 tons), combined with much larger reserves in the southwestern region, makes Poland one of the world's leading coal producers. The 1953 output was 88,000,000 metric tons, a third of which was produced in former German territory. Iron ore deposits are located in the Kielce and Radom districts and in German Silesia. Production in 1952 was 1,000,000 tons. Zinc and lead ores are located chiefly in Upper Silesia and the voivodships of Kielce and Kraków. Prewar Poland's principal oil-producing areas, Boryslaw-Drohobycz, are in the territory ceded to the Soviet Union; 1952 production was about 1,700,000 barrels (one-third of prewar). Among other deposits, Poland possesses copper, sulfur, chalk, clay, kaolin, marble and granite.

Forests cover 22 per cent of the land, but important wood resources are located in the territory ceded to the Soviet Union, and current production supplies less than half the annual need.

Poland's climate is dependent upon her proximity to the Baltic and to the Carpathian Mountains. Abundant rainfall (annual average: 22.8 in.) is caused by the predominating western oceanic winds. Snowfall is not heavy, but temperatures below zero are not uncommon, and the rivers are generally icebound for two and a half to three months each year.

## Portugal (Republic)

### (República Portuguesa)

Area: 35,413 square miles.

Population (est. 1953): 8,621,000 (practically all Portuguese).

Density per square mile: 243.4.

President: Gen. Francisco Higinio Craveiro Lopes.

Premier: António de Oliveira Salazar.

Principal cities (census 1950): Lisbon, 790,434 (capital, seaport); Oporto, 284,842 (seaport, port wine); Setúbal, 44,030 (seaport, sardines); Coimbra, 42,640 (university); Funchal (in Madeira Islands), 37,215 (Madeira wine).

Monetary unit: Escudo.

Language: Portuguese.

Religion: Roman Catholic.

**HISTORY.** Rolling and rugged Portugal is about the size of Indiana and, thanks to the days when its sailors and explorers were among the world's most venturesome, has a colonial empire 23 times the area of the homeland. A traditional ally of Britain, Portugal remained neutral in World War II but gave the Allies the right to use vital island bases in the Atlantic.

Portugal was part of Spain until it won independence in 1143 with Alfonso I as the first king. During the long reign of King John I (1385-1433), a great commercial empire was built, largely through the exploratory hobby of the king's son, Prince Henry the Navigator. Bartholomeu Diaz explored Africa's west coast and reached the Cape of Good Hope in 1488. Vasco da Gama rounded the Cape and discovered the water route to India in 1497-99. Portugal's empire reached its crest about 1540, when it embraced the coast of Brazil, east and west Africa, Malabar, Ceylon, Persia, Indo-China and Malaya.

In 1580-81 Spain and Portugal were joined in a personal union under Philip II of Spain. Portugal revolted in 1640 and set up a new dynasty under John IV, Duke of Braganza, but the country never recovered its position as one of Europe's major powers. In 1806, when Portugal refused to obey Napoleon's orders that all continental ports be closed to British ships, French forces invaded the country but were ousted in 1811 by British and Portuguese forces under the Duke of Wellington. The royal family had fled to Brazil in 1807 but following an uprising at home, the king, John VI, returned in 1821.

Brazil declared its independence in 1822 and John's son, Pedro, became emperor of the new state as Pedro I. In 1832, Pedro I, who had abdicated as emperor of Brazil in 1831, returned to Europe and led an uprising with British assistance in favor of his daughter, Maria II, displacing his younger brother, Miguel I, who had been proclaimed king in 1828. The descendants of Maria's marriage with Ferdinand of Saxe-Coburg ruled Portugal until 1910, when King Manoel II was forced into exile by a republican revolt.

On June 19, 1911, the monarchy was abolished, and a republican constitution was introduced. Portugal proclaimed its loyalty to the British alliance upon the outbreak of World War I, and Portuguese troops fought both in Africa and on the Western Front.

On May 30, 1926, a revolution led by the army deposed the president and set up a military dictatorship. General António Oscar de Fragoso Carmona became premier and acting president Nov. 29, 1926, and was elected president on March 25, 1928. Dr. António de Oliveira Salazar, who was appointed finance minister in 1928, founded



the organization known as the National Union in 1930 and has been premier and dictator since 1932. His regime, while admittedly opposed to liberal or democratic principles, brought political and economic stability to Portugal.

General elections for members of the National Assembly held on Nov. 18, 1945, Nov. 13, 1949 and Nov. 8, 1953 were, except in isolated districts in 1953, boycotted by the opposition, and the National Union was continued in office. Portugal adhered to the North Atlantic Pact in April, 1949.

President Carmona died April 18, 1951; Gen. Francisco Lopes was elected without opposition to succeed him July 22, 1951.

**GOVERNMENT AND DEFENSE.** Under the constitution of 1933 Portugal is a corporative republic. The president is popularly elected for a term of 7 years; the National Assembly of 120 members for a term of 4 years. There is also a corporative chamber which handles economic, social and some legislative matters; its members are representatives of local autarchies and of the several branches of social activities—administrative, moral, cultural and economic. The Assembly theoretically may overrule the president's veto by two-thirds vote. The president appoints the premier, who in turn selects the cabinet; the latter is not responsible to the National Assembly.

Military service is compulsory; the initial training period is 6 years, but not all those liable for duty are called up. The army numbered about 64,000 in 1951 (including the Portuguese Legion, a volunteer force); the air force had 575 planes in 1949. The navy in 1953 had 5 destroyers, 3 submarines, 8 sloops and several smaller craft. Naval personnel numbers about 7,000.

**SOCIAL AND ECONOMIC CONDITIONS.** Education is compulsory, but in 1950, 40.4% of the population (7 years and over) could not read and write. Public primary schools numbered 11,127 in 1950-51, with 609,909 pupils. Secondary schools numbered 43 with 21,962 pupils. Private primary schools were attended by 33,468 pupils; private secondary schools by 26,523. There were 3 universities (Lisbon, Lisbon and Oporto) with 10,084 students.

Portugal's corporate state has a planned economy in which each producing unit regulates itself in the interest of the nation. Corporate units have been established in agriculture, industry and finance. As an example, the government controls the wine trade by means of a federation of growers and a guild of exporters.

Sixty per cent of Portugal's people are engaged in agriculture. Although wheat is the leading crop, it is insufficient to meet domestic needs, and grain must be

imported. One of the world's leading wine-makers, Portugal produces two famous kinds—Port in the vicinity of Oporto, and Madeira in the islands of the same name. In olive oil production, Portugal usually ranks third in the world (estimated production 1953: 133,000 metric tons).

Leading crops in 1953, in metric tons, were wheat, 640,000; barley, 119,000; oats, 131,000. Wine production in 1953 was about 274,200,000 U. S. gallons (1948-52 average: 214,000,000 gallons).

Wool production in 1952 was approximately 6,000 metric tons, clean basis.

Trade statistics, in millions of escudos:

	1951	1952	1953*
Exports	7,516	6,854	6,314
Imports	9,497	9,991	9,514

\* Preliminary.

In 1953 the principal customers were the Portuguese overseas territories (27%), the U. S. (16%) and Britain (13%); chief suppliers, the Portuguese territories (16%), Britain (15%) and Belgium (11%). The chief exports were cork (12%), fish, mainly sardines (10%) and wine (10%). Leading imports included wheat and flour, ships, industrial machinery, raw cotton and iron and steel.

On June 30, 1953, the merchant marine had 315 vessels (100 tons and over) of 543,612 gross tons. Railway mileage in 1951 was 2,230, and highway mileage was 16,927.

**NATURAL FEATURES AND RESOURCES; CLIMATE.** Portugal is crossed by many small rivers, and also by three large ones which rise in Spain, flow into the Atlantic, and divide the country into three geographic areas. The Minho (Miño in Spain) River, part of the northern boundary, cuts through a mountainous area that extends south to the vicinity of the Douro (Duero) River. South of the Douro the mountains slope to the plains about the Tagus (Tejo) River. The remaining division is the southern one of Alentejo.

The Azores, stretching over a distance of 400 miles in the Atlantic, consist of 9 islands divided into three groups, with total area of 888 square miles. The nearest continental land is Cape da Roca, Portugal, which lies 800 miles to the east. The Azores are an important station on Atlantic air routes, and both Britain and the United States established air bases there during World War II. Madeira, consisting of two inhabited islands, Madeira and Porto Santo, and two groups of uninhabited islands, lies in the Atlantic about 535 miles southwest of Lisbon. Total area of the Madeiras is 314 square miles.

Mineral resources have not been fully developed, but wolfram, coal, iron ore, copper, manganese, iron pyrites, lead, tin,

and other ores are found. The coal output in 1953 was 477,000 metric tons; (1952) pyrites, 758,900 tons; tin (ore), 1,028 long tons; lead (smelter), 700 metric tons; tungsten, 4,900 tons. Uranium deposits have been reported in Portugal.

Portugal is one of the world's leading producers of cork; production in 1951 was 199,586 metric tons. In 1951, 54,523 metric tons of resin and 10,384 tons of turpentine were exported.

The fishing industry is a basic part of the national economy, employing 39,924 men and 16,687 boats in 1951. Of special importance is the sardine industry centered at Setúbal, south of Lisbon. The total fishing catch in 1952 was 337,200 metric tons.

Portugal's climate is equable and temperate, but in the deep valleys where the mountains keep out the cool winds from the Atlantic, it is excessively hot in summer. Lisbon, Coimbra and Oporto all have mean temperatures of 60° to 61.5°. Heavy fogs are common along the coast. Rainfall is as high as 110 inches annually in the north and on the Serra da Estrela.

#### PORTUGUESE OVERSEAS TERRITORIES

	Area, sq. mi.	Population, census 1950
<b>AFRICA</b>		
Angola (Portuguese West Africa)	487,788	4,145,184
Cape Verde Islands	1,539	147,097
Mozambique (Portuguese East Africa)	297,654	5,738,819
Portuguese Guinea	13,944	508,970
São Tomé and Príncipe Islands	372	62,159
<b>ASIA</b>		
Macao	5	187,772
Portuguese India	1,538	637,846
Timor	7,330	442,378

The status of the Portuguese overseas territories is fixed by the Colonial Act of July 1930 included in the constitution approved March 19, 1933, and revised in 1951. Each territory has a governor or governor general, appointed by the council of ministers for an initial 4-year term and responsible to the minister of overseas territories at Lisbon. Each territory has financial and administrative autonomy.

**ANGOLA (Portuguese West Africa)**—Status: Overseas territory.

Capital: Loanda (population 158,882).  
Governor General: José Agapito da Silva Carvalho.

Foreign trade (1952): exports, 2,751,769,-711 escudos; imports, 2,627,135,027 escudos. Chief exports: coffee (41%), diamonds.

Agricultural products (1952): sugar, 50,-175 metric tons; cotton, 21,404 tons; sisal, 25,100 tons; coffee (exports), 47,711 tons; maize; palm kernels and oil; peanuts; rice.

Minerals: diamonds (1952: 743,302 carats), lignite, copper.

Forest products: beeswax, timber.

Industries: sugar, palm oil, whale oil, fish oil.

Angola stretches along the west African coast for about 1,000 miles from Belgian Congo to the Cunene River. Outside of a coastal plain varying in width from 30 to 100 miles, the area is part of the great African plateau. The Angola coast and the Congo River were explored by the Portuguese in 1482-85, and Loanda was founded in 1576. The governor general is assisted by a council of 10 (5 officials and 5 Portuguese nationals).

Angola is primarily an agricultural country. Its varied altitude enables it to produce both tropical and temperate crops. Excellent grazing land exists in many parts of the colony. The chief ports are Loanda and Lobito. The great majority of the population are of Bantu-Negro stock, mixed in the Congo district with the pure Negro. Europeans in 1950 numbered 78,903; half-castes, 29,550.

Mean annual temperature at Loanda is 74.3°; the cool season lasts from June to September, the wet from October to May. Rainfall in the lower altitudes exceeds 40 inches annually.

**CAPE VERDE ISLANDS**—Status: Overseas territory.

Capital: Praia (population 9,980).

Governor: Carlos Alberto Garcia Alves Roçadas.

Foreign trade (1951): exports, 225,028,-000 escudos; imports, 246,049,000 escudos. Chief exports: salt, preserved fish.

Agricultural products: coffee, millet, castor oil, oranges, hides.

This group of 14 volcanic islands lying off the west African coast was discovered in 1456 by the Venetian captain Alvise Cadamosto, in the service of Prince Henry the Navigator. The island of São Vicente is an important coaling station on the South American route. The vast majority of the inhabitants are mulattoes (101,498 in 1950) and Negroes (42,487)—descendants of slaves brought to the islands from Africa by early settlers. Public slavery was abolished in 1854, and private slavery in 1876. Europeans in 1950 numbered 3,109.

Summer temperatures are high in the archipelago, ranging up to 90° near the sea. The rainy season lasts from August to October.

**MOZAMBIQUE (Portuguese East Africa)**—Status: Overseas territory.

Capital: Lourenço Marques (population 93,265).

Governor General: Gabriel Maurício Teixeira.

Foreign trade (1953): exports, 1,619,-757,000 escudos; imports, 2,288,070,000 escudos. Chief exports: cotton (33%), copra (12%), sugar, cashew nuts, sisal.



**Agricultural exports (1953):** cotton, 38,-287 metric tons; copra, 38,615 tons; sugar, 68,550 tons; cashew nuts, 55,843 tons; sisal, 22,831 tons; tea, 3,503 tons; vegetable oils. **Minerals:** gold, coal, graphite, mica.

**Forest products:** mangrove bark, timber.

Mozambique, stretching for about 1,430 miles along Africa's southeast coast, was discovered by Vasco da Gama in 1498, although the Arabs had penetrated into the area as early as the 10th century A.D. It was first colonized in 1505, and by 1510 the Portuguese were masters of all the former Arab sultanates on the east African coast. The boundaries with British Central and South Africa were delimited in 1891, and with Tanganyika Territory in 1886 and 1890. By the Treaty of Versailles, following World War I, Portugal was allotted the Kionga triangle, formerly part of German East Africa. One of the four provinces—Manica and Sofala (87,454 sq. mi.)—was held by the Mozambique Company until 1942, when the Portuguese Government refused to renew its charter.

Agriculture is the chief industry. There are many large plantations, some of which are partially mechanized. Stockraising is hampered by prevalence of the tsetse fly.

Ninety-nine per cent of the inhabitants are native Africans of the Bantu Tribes. In 1950, there were 48,213 Europeans, 12,630 Asiatics and 25,149 mulattoes. There were 1,652 miles of railway and 18,078 miles of road, mostly unimproved. The chief ports are Lourenço Marques and Beira, which is also the port for Rhodesia. The principal river, the Zambezi, divides the colony in half.

The cool season lasts from April to August, and the rainy season from December to March. On the central coast the mean annual temperature is about 85°.

**PORTUGUESE GUINEA—Status:** Overseas territory.

**Capital:** Bissau (population 18,309).

**Governor:** Raimundo António Rodrigues Serrão.

**Foreign trade (1950):** exports, 118,000,-000 escudos; imports, 128,000,000 escudos. **Chief export:** peanuts (32,000 metric tons).

**Agricultural products:** peanuts, palm kernels, hides, rice.

**Forest products:** wax, timber.

This area, lying on the west African coast and almost surrounded by French West Africa, was discovered in 1446 by the Portuguese Nuno Tristão and was separated from the colony of the Cape Verde Islands in 1879. It consists of a low-lying coastal region and 60 islands off the coast. The country is undeveloped economically, and most of the natives are farmers. There are no railways, but navigable rivers totaling over 1,000 miles are important trade arteries; there are also about 1,820 miles of roads. About two-fifths of the natives are Moslem; there were 2,254 Europeans in

1950. On the coast, temperature varies between 77° in January and 85° in May. The dry season extends from December to May.

**SÃO TOMÉ AND PRÍNCIPE—Status:** Overseas territory.

**Capital:** São Tomé (population 7,813).

**Governor:** Carlos de Sousa Gorgulho.

**Foreign trade (1951):** exports, 217,000,-000 escudos; imports, 150,000,000 escudos. **Chief exports:** cacao, coffee, copra.

**Agricultural products:** cacao, coffee, coconuts, copra, palm oil.

These volcanic islands, lying in the Gulf of Guinea about 150-175 miles off the west African coast, were discovered by the Portuguese in 1471. Most of the early inhabitants were convicts and Jews from Portugal and slaves from Brazil and the mainland, but the bulk of the present inhabitants are Negro contract laborers from the mainland and Cape Verde engaged to work cacao plantations. There were 1,152 Europeans and 4,300 mulattoes in 1950.

**MACAO—Status:** Overseas territory.

**Capital:** Macao (population 166,544).

**Governor:** Joaquim Marques Esparteiro.

**Chief exports:** fish, tement, preserves.

**Manufactures:** cement, preserves, firecrackers, vegetable oils, metal products.

Macao comprises the peninsula of Macao and the two small islands of Taipa and Colôane on the south China coast, about 35 miles from Hong Kong. Established by the Portuguese in 1557, it is the oldest European outpost in the China trade, but Portugal's sovereign rights to the port were not recognized by China until 1887, and its boundaries are still not delimited. The port has been eclipsed in importance by Hong Kong, but it is still a busy distribution center, and also has an important fishing industry employing over 40,000 people. It is notorious for its opium trade and gambling houses. Most of the population is Chinese; Europeans numbered 2,719 in 1950.

**PORTUGUESE INDIA—Status:** Metropolitan province.

**Capital:** Panjim (Nova Gôa) (population 31,950).

**Governor General:** Paulo Benard Guedes.

**Foreign trade (1951):** exports, 25,900,-000 ruplas\*; imports, 88,900,000 ruplas. **Chief exports:** fish, spices, copra.

**Agricultural products:** cashew nuts, coconuts, spices.

**Minerals:** manganese, salt.

\* 1 rupla = 5.97 escudos.

The area consists of Gôa and 3 islands on the Malabar coast of India; Damão and the territories of Dadará and Nagar-Aveli, on the Gulf of Cambay; and Diu, with the continental territories of Gocôla and Simbor, on the coast of Gujarat. Gôa, captured in 1510 by the Portuguese, later became capital of the whole Portuguese empire in the east. The native population is largely Hindu.



**TIMOR**—Status: Overseas territory.

Capital: Dili (population 7,000).

Governor: Cesar Maria de Serpa Rosa.

Foreign trade (1951): exports, 32,400,000 escudos; imports, 45,100,000 escudos. Chief exports: coffee, sandalwood, wax, copra.

Agricultural products: coffee, copra.

Forest products: sandalwood, wax.

Portuguese Timor consists of the eastern half of the island of Timor in the Malay Archipelago, with the territory of Ambeno and two neighboring islands. It was first settled by the Portuguese early in the 16th century. In 1859 the island was divided between Portugal and the Netherlands; later boundary adjustments were made in 1904. Fishing and copra manufacture are important; trade is mostly in the hands of Chinese, Malaysians and Arabs. Europeans numbered 568 in 1950. The territory was occupied by Dutch and Australian troops in Dec. 1941, and by the Japanese in Feb., 1942.

## Rumania (People's Republic) (Republica Populara Romăna)

Area: 91,654 square miles.

Population (est. 1952): 16,300,000 (1948: Rumanian, 85.7%; Magyar, 9.4%; German, 2.2%; Jews, 0.9%; others [Turkish, Rumanian, Bulgarian, Gypsy, Ukrainian] 1.8%).

Density per square mile: 177.8.

Chairman of Presidium: Petru Groza.

Premier: Gheorghe Gheorghiu-Dej.

Principal cities (census 1948): Bucharest, 1,401,807 (capital); Cluj, 110,956 (Transylvanian industrial center); Jassy, 108,987 (trading center, Moldavia); Timisoara, 108,296 (western commercial center); Ploesti, 105,114 (oil).

Monetary unit: Leu.

Languages: Rumanian, Hungarian, German, Turkish.

Religions (est. 1947): Eastern Orthodox, 81%; Greek Catholic, 9%; Roman Catholic, 7%; others, 3%.

**HISTORY.** In World War I, Rumania joined the Allies and won enough land at the peace conference to double its size. In World War II, Rumania joined the Axis and lost about half its earlier gains. Its present size is about that of Oregon. Politically, it is dominated by the Soviets.

Most of Rumania was the Roman province of Dacia from about A.D. 100 to 275. From the 6th to the 12th centuries, wave after wave of barbarian conquerors—Vlachs, Bulgars and others—passed over the area. Of the two regions which eventually became Rumania, Walachia was taken by the Turks in 1411, and Moldavia in the 16th century, but both retained semi-autonomy. After the Russo-Turkish War, they went under *de facto* Russian protection in 1774.

The Treaty of Paris following the Crimean War nominally united the two prov-

inces in 1858, and Alexander Cuza was elected Prince of Moldavia and Walachia. In 1866 he was forced to abdicate and was succeeded by Prince Carol of Hohenzollern-Sigmaringen. The Treaty of Berlin recognized Rumania's complete independence in 1878, and in 1881 the principality was elevated to a kingdom. Rumania's spoils from the Second Balkan War in 1913 included the Black Sea province of Dobruja. The following year King Carol I was succeeded by his nephew, Ferdinand. The gains of World War I, making Rumania the largest Balkan state, included Bessarabia, northern Transylvania and Bukovina. The Banat, a Hungarian area, was divided with Yugoslavia.

In 1926 Crown Prince Carol renounced his rights to the throne, and when King Ferdinand died on July 20, 1927, Carol's son, Michael (Mihai) became king under a regency. However, Carol returned from exile in 1930, was crowned King Carol II, and gradually became a powerful political force in the country. On Feb. 10, 1938, he abolished the democratic constitution of 1923. On June 21, 1940, the country was reorganized along fascist lines, and the fascist Iron Guard became the nucleus of the new totalitarian party. On June 27, the Soviet Union occupied Bessarabia and northern Bukovina. By the Axis-dictated Vienna Award of Aug. 30, 1940, two-fifths of Transylvania went to Hungary. On Sept. 4, the king dissolved Parliament and granted the new premier, Ion Antonescu, full power, after which he abdicated and went into exile with his mistress, Magda Lupescu, whom he married in 1947 when she became gravely ill. The first official act of his son, Michael I, was to confirm Antonescu in his status as head of the state and premier. Rumania subsequently signed the Axis Pact on Nov. 23, 1940, and the following June joined in Germany's attack on the U.S.S.R., reoccupying Bessarabia. Following the invasion of Rumania by the Red Army in Aug., 1944, King Michael led a coup d'état which ousted the Antonescu government. An armistice with the U.S.S.R. was signed Sept. 12 in Moscow.

Elections held Nov. 19, 1946, resulted in a victory for the Communist-dominated government bloc. Michael abdicated on Dec. 30, 1947, and thereafter the nation was declared a "people's republic." The Communist-controlled People's Democratic Front was unopposed in elections held Nov. 30, 1952.

**GOVERNMENT.** The 1952 constitution is based on that of the U.S.S.R. The supreme organ of state authority is the Grand National Assembly of 423 members elected for 4 years by all citizens over 18. It elects a presidium to act when it is not in session and also elects the council of ministers, headed by the premier, which is the

supreme executive and administrative organ.

**PEACE TREATY OF 1947.** The Paris peace treaty ratified on Sept. 15, 1947, confirmed the *de facto* cession to the Soviet Union of Bessarabia and northern Bukovina, the return to Rumania from Hungary of northern Transylvania (thus annulling the Vienna Award of 1940) and the cession of southern Dobruja to Bulgaria. In addition, Rumania was required to pay reparations in kind in the amount of \$300,000,000 (reduced to \$225,000,000 by the U.S.S.R. in 1948) to the Soviet Union over a period of eight years. She also was to make compensation in lei to the amount of two-thirds of the original value of Allied property damaged or destroyed in Rumania.

The treaty limited the strength of the Rumanian armed forces as follows: army 125,000 men, navy 5,000 men and tonnage of 15,000, air force 8,000 men and 150 planes. The Soviet Union has the right to maintain line-of-communication troops in Rumania until a treaty with Austria becomes effective. The armed forces are being reorganized and re-equipped with Soviet assistance.

Despite treaty limitations, the total of Rumanian armed-forces personnel was estimated at more than 350,000, including security troops, in early 1953.

**SOCIAL AND ECONOMIC CONDITIONS.** Education is free and compulsory. Illiteracy was 23.1% in 1948. In 1952 there were 15,546 elementary schools with 2,100,000 pupils. Secondary students numbered 365,310 in 1951. There are five universities—at Bucharest, Jassy, Cluj (2) and Timisoara.

Rumania is predominantly agricultural, with about 80 per cent of the population engaged on the soil. In wheat, rye and other grains, it is one of the richest countries of southeastern Europe. The largest acreage is usually devoted to corn and wheat. Other crops are flax, hemp, fruit, vegetables, potatoes, sugar beets, sunflower seeds, tobacco and grapes. Stockraising is also important. Wool production in 1952 was about 8,000 metric tons, clean basis.

Agrarian reform measures effected in 1945 provided for the distribution of estates over fifty hectares (123.6 acres) in lots of twelve and one-half hectares to each peasant.

Industrialization has made considerable progress under a 5-year plan covering the years 1951-55 which emphasized the iron, steel, metal, machinery and other heavy industries. Most important industries are controlled by Soviet-Rumanian joint companies. Industries directly connected with agriculture, such as flour milling, distilling and brewing, are still of basic importance. Probably the most important industries

are food processing, textiles, metals, chemicals, wood and paper. All but the smallest business enterprises have been completely nationalized.

Foreign trade is under complete government control. Exports in 1950 were \$239,000,000; imports, \$213,000,000. The U.S.S.R. took 58% of the exports and supplied 49% of imports; Czechoslovakia, Poland, Hungary and Bulgaria took 30% of exports and supplied 33% of imports. Principal exports are ordinarily petroleum products, cereals and cereal products, wood and wood products. Leading imports are iron and manufactures, machinery and motors, vegetable fibers and products.

The Danube, flowing along the southern border for more than 200 miles, is a highly important commercial artery. Transshipment between seagoing vessels and river barges is made at Galati and Braila. Sovromtransport, a Soviet-Rumanian joint company, monopolizes river and sea transport. The principle of freedom of navigation on the Danube for all nations was recognized in the 1947 peace treaty but seems unlikely to be implemented. The principal seaport is Constanta.

Railway mileage in 1949 was 7,363; highway mileage in 1945 was 43,163. The Sovrom Civil Aviation Company, under Soviet management but financed equally by the U.S.S.R. and Rumania, has the monopoly for all civil air transport inside Rumania and to the Black Sea.

The 1953 budget provided for revenue of 38,510,000,000 new lei and expenditure of 37,510,000,000 lei.

Postwar inflation was severe, and in Aug., 1947, the leu was stabilized at the rate of one new leu to 20,000 old. A second currency reform, effected Jan. 27, 1952, tied the leu to the Soviet rouble and required the exchange of old lei for new lei at varying rates.

**NATURAL FEATURES AND RESOURCES; CLIMATE.** The Carpathian Mountains divide Rumania's upper half from north to south and connect near the center of the country with the Transylvanian Alps, running east and west.

North and west of these ranges lies the Transylvanian plateau, and to the south and east are the plains of Moldavia and Walachia. In its last 190 miles, the Danube River flows through Rumania only. It enters the Black Sea in northern Dobruja, just south of the border of the Soviet Union.

By far the most valuable of Rumanian minerals is oil, produced chiefly in the Ploesti region about 35 miles north of Bucharest. Production in 1953 was officially estimated at 9,300,000 metric tons (about 69,300,000 barrels). Sovrompetrol, a Soviet-



Rumanian joint company, has complete control of the petroleum industry.

Natural gas from Transylvania is the second most important mineral, coming to 3,300,000,000 cubic meters in 1950. Other important minerals are iron ore (1950: about 395,000 tons), lignite (1950: 3,150,000 tons), copper, gold and silver.

The Moldavian-Walachian region has hot summers and extreme frosts and blizzards in winter. Variations are less extreme in Transylvania and the Banat. Bucharest's average summer temperature is 72°; winter 27°. In some winters the Danube is ice-bound for as long as three months. Rainfall, heaviest in summer, averages 15-20 inches annually.

## El Salvador (Republic) (República de El Salvador)

Area: 13,176 square miles.

Population (est. 1953): 2,088,431 (mestizo, 78%; Indian, 11%; white, 11%).

Density per square mile: 158.5.

President: Oscar Osorio.

Principal cities (census 1950): San Salvador, 160,380 (capital); Santa Ana, 51,676 (coffee); San Miguel, 26,831 (coffee, henequén).

Monetary unit: Colón.

Language: Spanish.

Religion: Roman Catholic.

**HISTORY AND GOVERNMENT.** El Salvador is the smallest, most densely populated of Central American nations, and the only one without an Atlantic coast line.

Pedro de Alvarado, a lieutenant of Cortez, conquered El Salvador in 1525. The area was administered as part of Guatemala until the general Central American revolution against Spain in 1821. El Salvador struck out as an independent republic in 1839 after the dissolution of the Central American Union. Its story since then has been largely one of revolution and strife.

In Jan., 1931, the first free election in 20 years brought in Arturo Araujo as president. He was overthrown before the year was over. General Maximiliano Hernández Martínez, his successor, remained in power until May, 1944, when a general strike forced his resignation. The next regime, also militarist-led, lasted only five months, and was succeeded March 1, 1945, by a regime headed by Salvador Castañeda Castro, who was ousted Dec. 14, 1948, by a revolutionary junta. Major Oscar Osorio, one of the junta's members, was named president in the March, 1950, elections.

The constitution provides for a president, popularly elected for six years and normally ineligible to succeed himself; also, a one-house legislature of 54 members. The military forces include an army

limited to 3,000, a militia, a national guard and a small air force.

**SOCIAL AND ECONOMIC CONDITIONS.** Education is free and compulsory; both public and private schools are state-controlled. In 1950, 57.7% of those 10 years of age and over could not read and write. Primary schools in 1953 numbered 2,026 with 197,188 pupils; secondary schools numbered 116 with 12,656 students. The national university had an enrollment of 1,083 students.

Mestizos (mixed white and Indian) are the predominant racial group. There are no tribal Indians.

El Salvador is one of the most intensively cultivated countries in Latin America. Coffee, which accounts for 85 per cent of the total exports (1952-53 production: 1,365,000 bags of 132 lb. each), is controlled in volume by a commission of officials and planters. Cotton is second in importance. Corn, sugar cane, beans, rice, tobacco, cacao, indigo, millet and sisal fiber are other products. There is some cattle raising and a few local factories.

El Salvador's largest national enterprise, the Lempa river hydroelectric project, went into partial operation during 1953.

Exports in 1953 totaled 222,000,000 colones; imports, 179,300,000 colones. About 75% of the trade is with the U. S.

The two railways have 385 miles of track. Highways (1952) included paved, 323 miles; gravel, 320 miles; dirt, 1,250 miles.

The 1954 budget balanced revenue and expenditure at \$60,800,000. The foreign debt on Dec. 31, 1953, was \$7,522,000; internal, \$3,837,000.

**NATURAL FEATURES AND RESOURCES; CLIMATE.** Most of El Salvador is a fertile volcanic plateau about 2,000 feet high. There are several volcanoes, some still active, and many lovely crater lakes.

Gold, silver, coal, copper, iron, zinc, mercury and sulfur are the nation's chief minerals. Gold production in 1953 totaled 19,934 troy ounces; that of silver, 348,328 ounces.

Forest resources, much smaller than in other Central American states, include dyewood, mahogany, cedar and walnut. El Salvador is a leading source of balsam.

Mountain ranges along the borders of Guatemala and Honduras give the highlands an almost temperate climate, but the lowlands are often hot and sultry. Temperatures at San Salvador range from about 59° (average daily low) in January to 85° (average daily high) in December; these are the two coolest months. The rainy season lasts from May to October.



## San Marino (Republic)

Area: 38 square miles.  
 Population (est. 1951): 12,969 (mostly Italian).  
 Density per square mile: 341.3.  
 Executive: two regents selected every six months by the Grand Council.  
 Principal town: San Marino (est. pop. 2,000) (capital).  
 Monetary unit: Lira.  
 Language: Italian.  
 Religion: Roman Catholic.

San Marino, the oldest and smallest republic in the world, is one-tenth the size of New York City. It is entirely surrounded by Italy, in the Apennines near Rimini. According to tradition, San Marino was founded about A.D. 350 and had good luck for centuries in staying out of the interminable wars and feuds on the Italian peninsula. The Pope recognized its independence in 1631.

San Marino hires its police and judges from Italy. It no longer confers titles for a consideration, but it does derive much revenue from the exporting of its postage stamps, which are changed often to keep philatelists buying. Other exports are barley, wine and cattle, as well as building stone from Mount Titano.

Executive power is exercised by regents, two of whom are appointed every six months from the popularly-elected Grand Council. There are several primary schools and a high school.

San Marino is linked with Rimini on the Adriatic by a 20-mile electric railway.

## Saudi Arabia (Kingdom)

Area: c. 597,000 square miles.  
 Population (est. 1952): 6,000,000.  
 Density per square mile: c. 10.1.  
 King: Sa'ud ibn Abd al Aziz al Sa'ud.  
 Prime Minister: Emir Faisal.  
 Principal cities (est.): Mecca, 150,000 (joint capital, religious center); Riyadh, 60,000 (joint capital); Medina, 45,000 (religious center); Jidda, 40,000 (chief port).  
 Monetary unit: Riyal.  
 Language: Arabic.  
 Religion: Mohammedanism.

The kingdom of Saudi Arabia, which occupies most of the Arabian peninsula, is almost entirely the creation of King Ibn Sa'ud (1882-1953). Its earlier history is that of Arabia. Descendant of earlier Wahhabi rulers, Ibn Sa'ud seized the emirate of Riyadh in 1901, at the age of 20, and soon set himself up as the leader of the Arab nationalist movement. By 1914 he had reconquered all of Nejd and Hasa. Remaining neutral during World War I, he resumed his drive after the war and through a series of local military campaigns was able to proclaim himself King of Hejaz and Nejd and dependencies in 1927. The

united kingdom of Saudi Arabia was proclaimed in 1932. Saudi Arabia remained neutral until nearly the end of World War II but was one of the original members of the U.N. and joined the Arab league in 1945. King Ibn Sa'ud died Nov. 9, 1953, and was succeeded by Sa'ud (born 1905), the eldest of his many sons.

Saudi Arabia is a nearly absolute monarchy. A council of ministers headed by the prime minister was formed in Oct. 1953. Hejaz and Nejd are under separate administrations. Tribal organizations are strong and influential. There is a small regular army.

The majority of the inhabitants are Bedouin—nomads following their flocks over the desert. The population is predominantly Sunni Moslem, and the religious law of Islam is the common law of the land. Mecca and Medina are the leading religious centers of Islam and the annual influx of pilgrims to those cities is the most important commercial activity outside the oil industry.

Saudi Arabia's desert climate restricts agriculture to the highlands of Asir and scattered oases. Dates are the staple crop; grain, fruits and vegetables are also grown. Camels, sheep and goats are raised and some animal products, such as hides, wool and ghee (clarified butter), are exported. Local industries include tanning, weaving and pottery making.

Most transportation continues to be by sea and by camel caravan, although roads and motor tracks now connect the major centers. A railroad from Damman to Riyadh (345 mi.), completed in 1951, is being extended across the peninsula to Medina and Jidda.

The kingdom's budget for the fiscal year 1953-54 estimated revenue at U. S. \$198,000,000 and expenditure at \$205,000,000. Direct payments from oil concessions in the form of royalties and income taxes totaled \$160,000,000 in 1952.

Oil, discovered in 1936 in the province of Al Hasa along the Persian Gulf, is produced by the U. S.-owned Arabian-American Oil Co. (Aramco). The main production centers are Dharan, Abqaiq, Qatif and Ain Dar. Production has skyrocketed since World War II. The company's expenditures and payroll are important invisible exports and oil revenues have greatly strengthened the financial position of the kingdom, which receives one-half the company's profits. The oilfields are connected by pipeline with the Mediterranean port of Sidon, Lebanon. In 1953 production totaled 308,294,245 barrels; the crude run at the Ras Tanura refinery was 74,559,673 barrels.

**Siam. See Thailand**

## Spain (Nominal Monarchy)

(España)

Area: 194,945 square miles.

Population (est. Dec. 31, 1953): 28,638,-977 (Spanish, Basque, Catalan).

Density per square mile: 146.9.

Chief of State: Francisco Franco y Bahamonde.

Principal cities (est. 1953): Madrid, 1,720,999 (capital); Barcelona, 1,346,737 (chief port, textiles); Valencia, 527,999 (silk, oranges); Sevilla (Seville), 398,462 (wines, iron ore); Málaga, 288,814 (sea-port); Zaragoza (Saragossa), 272,479 (rail center).

Monetary unit: Peseta.

Languages: Spanish, Basque, Catalan.

Religion: Roman Catholic.

**HISTORY.** Spain, twice the size of Oregon, was once one of the world's great powers. From 201 B.C. to A.D. 406, it was part of the Roman Empire. Then the Goths and the Vandals formed a powerful kingdom, which was partially conquered in the 8th century by the Moors from Africa. The last Moorish stronghold, the kingdom of Granada, fell to the forces of King Ferdinand and Queen Isabella, who were trying to unify Spain, in 1492. In the same year, the Spanish-financed explorer Christopher Columbus was discovering the new world for the Spanish crown.

Charles V (1516-55) became King of Spain and also Holy Roman Emperor. Under his son, Philip II, Spain reached the peak of its power, but the beginning of decline set in with Britain's defeat of the "Invincible" Armada in 1588.

The line of Spanish Hapsburgs ended in 1700, and the War of the Spanish Succession followed. By the Treaty of Utrecht (1713) Spain was forced to accept a Bourbon king, the Duke of Anjou, and lost Gibraltar and all holdings in the Netherlands and southern Italy. Then, while the Spaniards were resisting Napoleon's efforts to establish a Bonaparte line in Spain, most of their colonies in America revolted and became independent. The loss of Cuba, Puerto Rico and the Philippines in the Spanish-American War of 1898 left Spain with only a few scattered possessions in Africa. Neutrality was maintained during World War I.

From 1923 to 1930 Spain was a military dictatorship under General Miguel Primo de Rivera. A wave of republicanism in 1931 forced the abdication of King Alfonso XIII, and a new constitution was drawn declaring Spain to be a workers' republic. Several revolts, strikes and shifts of government kept Spain in political chaos, and on July 18, 1936, the army revolt led by General Francisco Franco burst into civil war. While Hitler and Mussolini helped Franco, Russia helped the Loyalist side. The last Loyalist forces surrendered on March 29, 1939. Spain became a dictator-

ship under Franco and signed the anti-Comintern pact in 1939.

While Franco shied away from the risk of becoming a belligerent in World War II, he was pro-Axis in sympathy, helped the Axis with supplies, intelligence and services to German U-boats, and even sent the Spanish Blue Division to help fight the Russians.

On Sept. 26, 1953, the U. S. and Spain signed three agreements providing for the use and development by U. S. forces of certain Spanish air and naval bases in return for U. S. military and economic aid to Spain.

**GOVERNMENT.** Franco is head of the state, national chief of the Falange party, prime minister and *caudillo* (leader) of the empire. Practically, the country is ruled by the cabinet (appointed by Franco), the National Council of the Falange party and, to a lesser extent, the Cortés (parliament). The principal function of the Cortés is the planning and formulation of laws without prejudice to Franco's veto power. Cabinet ministers, party officials, civil governors, university heads, and the presidents of learned bodies become members of the Cortés *ex-officio*. There is no provision for the introduction of legislation by any of the members.

In a referendum held July 6, 1947, the Spanish people approved a Franco-drafted succession law declaring Spain a monarchy again. Franco, however, is to continue as chief of state and upon his death or incapacity the Government and a Council of the Realm constituted by the law are to nominate as king "that person of royal blood who is most qualified by right," subject to the approval of the Cortés. The law reserves to Franco the right to nominate his own successor, subject also to the Cortés approval by two-thirds vote.

**DEFENSE.** Franco is commander in chief of the army, navy and air force, each administered by a cabinet minister responsible to him. Military service is compulsory for two years. The standing army is estimated at 425,000 men. The navy in Dec. 1953 had 6 cruisers, 20 destroyers, 6 submarines, 11 frigates and escort vessels and many smaller vessels. Several destroyers and smaller vessels were under construction. The budgetary allotment for defense is about 40 per cent.

**SOCIAL AND ECONOMIC CONDITIONS.**  
**Education.** Primary education is compulsory and free; religious instruction is permitted. In 1947, 20.8% of those 5 years of age and over could not read and write. In 1948, there were 55,111 public primary schools with 2,063,646 pupils, 119 secondary schools with 213,818 students, 53 normal schools (1949) with 24,171 students and 12 universities with 41,844 students.



**Agriculture.** Spain is predominantly agricultural, although there are extensive non-arable areas. The principal land uses, apart from forest, pasture and forage crops, are the production of grain, potatoes, pulse, sugar beets, oranges, grapes and olives. Since the civil war Spain has not recovered balance in production and consumption of foodstuffs. Normally, Spain produces exportable quantities of oranges, lemons, almonds, filberts, raisins and other subtropical commodities. Wine production in 1953 was about 481,000,000 U. S. gallons; olive oil production was about 315,000 metric tons.

**Livestock,** also important, included in 1950, 4,200,000 cattle, 16,000,000 sheep and (1951) 4,222,000 goats and 2,670,000 hogs. Wool production in 1952 was 23,000 metric tons, clean basis.

#### PRINCIPAL CROPS (thousands of metric tons)

	1951	1952	1953*
Wheat	4,266	4,098	3,026
Barley	2,151	2,200	1,492
Rye	514	495	405
Oats	551	554	435
Maize	607	447	707

\* Provisional.

**TRADE.** Statistics of foreign trade are as follows, in millions of U. S. dollars:

	1951	1952	1953
Exports	462	408	486
Imports	384	518	597

In 1953 the chief customers other than the Spanish colonies were Britain (16%), western Germany (13%) and the U. S. (10%). Leading suppliers other than the colonies were the U. S. (12%), western Germany (12%) and France (11%). Leading exports in 1952 were oranges (18%), wine (6%) and iron ore (4%). Major imports were raw cotton, chemical products (especially fertilizer), wheat, petroleum and tobacco.

**Industry.** The textile industry, concentrated in Catalonia and normally employing over 300,000 workers, leads all others. The paper and chemical industries are also important. Pig iron production in 1953 was 798,200 metric tons; steel production, 904,300 tons. On March 31, 1954, 60 vessels of 126,850 gross tons were under construction. **Communications.** The merchant fleet, which suffered severely during the civil war and World War II, comprised 1,126 vessels (100 tons and over) of 1,270,817 gross tons on June 30, 1953, according to *Lloyd's Register*. The highway system is about 80,000 miles. In 1951, there were 11,100 miles of railway.

**Finance.** Recent data (budget estimates) are as follows, in millions of pesetas:

	1950-51*	1952-53*	1954-55*
Revenue	17,847	22,208	26,074
Expenditure	17,941	22,477	26,340

\* Data are for each year in indicated biennial budgetary period.

The public debt on Dec. 31, 1953, was 76,879,200,000 pesetas, including treasury bonds and guaranteed obligations.

**NATURAL FEATURES AND RESOURCES;** **CLIMATE.** Spain, less than ten miles from Africa at the closest point, and separated from France by the Pyrenees, is generally a broad plateau sloping to south and east and crossed by a series of mountain ranges and river valleys. Most of the coast line is steep and rocky, with few indentations.

**Minerals.** Spain's mineral wealth, second to agriculture in the national economy, yields millions of tons of ore. In 1950 the mining and metallurgical industries employed 255,818 workers; output was valued at 11,358,300,000 pesetas. Following are production figures for 1953, in metric tons: coal and lignite, 13,944,000; iron ore, 2,956,200; lead ore, 85,700; zinc ore, 148,000; potash ore, 1,052,400; mercury (1952), 1,349. Spain also produces copper, gold, magnesite, sulfur, tungsten, phosphates, silver and, reportedly, uranium.

**Forests and Fisheries.** Spanish forests yield lumber, pine resins, cork and esparto. Some 100,000 persons work in the fishing, canning and related industries. The 1952 catch, principally cod, tunny and sardines, was 501,100 metric tons, valued at 2,481,300,000 pesetas.

**Climate.** Most of Spain's weather is extreme. Madrid, for example, reaches a high of 110° and a low of 10°. In the southeast, the protection of the Sierra Nevada makes the climate subtropical. The northeast, with climate much like that of the British Isles, is the only region with normal rain. **OUTLYING ISLANDS.** Off Spain's east coast in the Mediterranean are the Balearic Islands, which total 1,936 square miles. The largest is Majorca (1,405 sq. mi.). Sixty miles west of Africa are the Canary Islands (2,804 sq. mi.).

#### SPANISH COLONIAL POSSESSIONS

Country	Area, sq. mi.	Population, est. 1952
Spanish Morocco		
Northern Zone	7,592	1,013,000
Southern Zone	10,039	13,000
Ifni	741	44,000
Ceuta, Melilla, Alhucemas, Chafarinas and Peñon de Velez	82	142,000
Spanish Sahara		
Rio de Oro	73,362)	
Saguia el Hamra	32,047)	38,000
Spanish Guinea	10,852	202,000

For Spanish Morocco, see Morocco.



## Sweden (Kingdom)

(Sverige)

Area: 173,341 square miles.

Population (est. Dec. 31, 1953): 7,192,316 (practically all Swedish).

Density per square mile: 41.5.

Sovereign: King Gustavus VI.

Prime Minister: Tage Fritiof Erlander.

Principal cities (est. Dec. 31, 1953): Stockholm, 769,714 (capital); Göteborg, 367,579 (chief port, shipbuilding); Malmö, 201,939 (seaport); Norrköping, 87,929 (textiles); Hålsingborg, 72,660 (seaport).

Monetary unit: Krona.

Language: Swedish.

Religions: Swedish Lutheran, 99%; others, 1%.

**HISTORY.** Although ancestors of today's Swedes lived in the area as long as 5,000 years ago, little is known of Sweden before the 10th century. Before 1100, King Olaf Skötkonung had united Sweden into a strong nation and established Christianity. In 1397 Sweden was united with Norway and Denmark under the Union of Kalmar. After the murder of several prominent Swedes by Christian II of Denmark in 1520, Sweden revolted under the leadership of Gustavus Vasa. Gustavus, elected king in 1523, founded the modern Swedish state and was the first European monarch to break relations with the Pope.

By the Treaty of Westphalia (1648) which concluded the Thirty Years' War (during which Gustavus Adolphus scored a number of brilliant military successes), Sweden acquired important German areas, including large portions of Pomerania. In 1700, Poland, Denmark and Russia united against Sweden. When peace was finally concluded in 1721, Sweden gave up Livonia, Estonia, Ingria and parts of Finland. Sweden participated in the coalition against Napoleon (1805-07) but in 1809 Finland was lost to Russia. Following the ouster of King Gustavus IV in 1809, a constitutional law still in effect was adopted, after which Charles XIII, uncle of Gustavus IV, was elected king. Since Charles XIII was childless, one of Napoleon's marshals, Jean Bernadotte, was elected Crown Prince and took over effective control of the government, succeeding to the throne in 1818 as Charles XIV. By the Treaty of Kiel (1814), Sweden acquired Norway from Denmark in return for Pomerania. The union with Norway lasted until 1905, when it was peacefully dissolved.

Neutrality was maintained through both World Wars. Sweden did not join the North Atlantic Pact in 1949.

**SOVEREIGN.** Gustavus VI, born Nov. 11, 1882, married (1) 1905, Princess Margaret Victoria (born 1882, died 1920); (2) 1923, Princess Louise Mountbatten (born 1889). To his first marriage was born Prince Gustavus Adolphus (born Apr. 22, 1906, killed in air crash Jan. 26, 1947), who was married

in 1932 to Sibylle, Princess of Saxe-Coburg-Gotha; their offspring include a son, Carl Gustavus, the heir apparent, born April 30, 1946, and four daughters. Gustavus VI became king Oct. 30, 1950, on the death of his father, Gustavus V, who had reigned since 1907.

**GOVERNMENT AND DEFENSE.** Executive and judicial authority is vested in the king alone, but his resolutions must be taken in the presence of the Council of State (cabinet), headed by the prime minister; the Council is appointed by the king but is responsible collectively to the Riksdag (parliament).

The Riksdag has an upper chamber of 150 members elected indirectly by the provincial and municipal councils for eight years, one-eighth being renewed each year. The lower chamber of 230 members is directly elected by popular vote for four years. There is universal suffrage for men and women over 21. The king has the right to initiate legislation and has an absolute veto over all bills except those relating to taxation.

Standings in the lower chamber (elections of Sept. 21, 1952): Social Democrat 110, Liberal 59, Conservative 31, Agrarian 25, Communist 5.

**Defense.** Military service is compulsory from the ages of 20 to 47; the initial training period is 15 months. The king is commander in chief of all the armed forces. The army, numbering about 600,000, with a trained reserve of 600,000, is well-equipped with the latest type weapons, many of them developed in Sweden. The air force has 600 planes. The navy on Jan. 1, 1954, had 3 cruisers, 2 coast defense ships, 12 fleet destroyers, 9 escort vessels, 24 submarines, 2 minelayers and numerous smaller craft. Naval personnel numbers about 10,000 in addition to coast artillery, under naval jurisdiction.

**SOCIAL AND ECONOMIC CONDITIONS.** **Education.** Public elementary education has been free and compulsory since 1842. Illiteracy is practically unknown. In 1951 there were 650,000 pupils in regular elementary schools as well as 143,179 pupils in regular secondary schools. The two universities—Uppsala and Lund—and four other schools of university grade had a total enrollment of 11,142 in 1950. The state also provides a large number of special vocational and continuation schools. The national church is the Swedish Lutheran Church, of which the king is supreme administrator.

**Agriculture.** Grain, hay, potatoes and sugar beets are products of the broad fertile plains of the south; cattle raising and dairy farming predominate in the north. Production of major crops in 1953 was as follows, in metric tons: wheat, 996,000;

rye, 305,000; maize, 470,000; oats, 983,000; mixed grain, 738,000; sugar beets, 1,997,000; potatoes, 1,856,000. The 1953 livestock census showed 362,000 horses, 2,554,000 cattle, 241,000 sheep and 1,410,590 hogs. Butter production in 1953 was 97,892 metric tons; cheese, 54,302 tons; milk, 4,478,000 tons.

**Industry.** The highly specialized machine industry produces separators, motors, electrical machines and apparatus, agricultural machinery, ball bearings, telephone equipment and harbor works. Pig iron production in 1953 totaled 1,001,000 metric tons; raw steel, 1,759,000 tons.

There are also large woolen, glass and porcelain industries. Shipyards build for both Swedish and foreign fleets; on March 31, 1954, 54 vessels of 409,376 gross tons were under construction. The timber and woodworking industries are extensive. The match industry is a single trust which covers the whole world.

**Trade.** Statistics of foreign trade are as follows, in millions of kronor:

	1951	1952	1953
Exports	9,226	8,134	7,645
Imports	9,192	8,953	8,172

Leading exports in 1953 were wood pulp (17%), wood (13%), paper (11%) and iron ore (9%). Leading customers were Britain (19%), western Germany (12%), Norway (8%) and the U. S. (7%). The chief suppliers were western Germany (17%), Britain (16%), the U. S. (8%) and the Netherlands (6%).

**Communications.** On June 30, 1953, the merchant marine comprised 1,268 ships (100 tons and over) of 2,575,397 gross tons, largely efficient motor vessels. The highly developed railway network totaled 10,250 miles in 1951, and there were about 56,200 miles of highway, mostly improved. By means of ferry steamers, Swedish state railways are connected directly with both Germany and Denmark.

**Finance.** Recent data are as follows, in millions of kronor:

	1952-53	1953-54*	1954-55*
Revenue	7,808	8,159	8,599
Expenditure	7,647	9,507	8,603

\* Budget estimate.

The public debt was 13,852,000,000 kr. on Dec. 31, 1953.

**NATURAL FEATURES AND RESOURCES; CLIMATE.** Sweden, with extreme length of about 990 miles and breadth of 250 miles, slopes eastward and southward from its peak elevation in the Kjölen mountains along the Norwegian border. In the north are mountains and many lakes. To the south and east are central lowlands, and south of them are fertile areas of forest, valley and plain. Along

Sweden's rocky coast, chopped up extensively by bays and inlets, are many islands, the largest of which are Gotland (1,220 sq. mi.) and Öland (519 sq. mi.). The country is landlocked to the north.

**Minerals.** Sweden's high-grade iron ore deposits are among the world's richest. Those in central Sweden produce principally for domestic use, while the ones in Lapland to the north are worked largely for export, with much of the output being shipped through the Norwegian port of Narvik. Production in 1953 was 16,984,000 metric tons. Gold production was 80,000 troy oz. Other major minerals are copper (19,998 tons), lead (16,153 tons), arsenic ore (75,000 tons), manganese ore (12,068 tons) and silver (735,000 oz.). Coal production (285,000 tons in 1953) is comparatively small; imports of several million tons a year are therefore necessary. Deposits of uranium have been reported in Sweden.

**Forests and Fisheries.** About 60 per cent of Sweden is forested, mostly in pine, and there are vast forest products industries in the north. Sweden supplies a large percentage of the world's mechanical and chemical pulp. In 1952, 3,072,000 metric tons of wood pulp, 330,000 tons of newsprint, 664,000 tons of other paper and 122,000 tons of cardboard were produced.

The average annual catch of fish is about 140,000 tons, half of it in small Baltic herring. Cod, mackerel and sprat also are taken in the Baltic, and the inland lakes and rivers are well stocked with salmon, trout and perch. The catch in 1953 (sea and coast fisheries) was 196,000 metric tons, valued at 120,000,000 kr.

**Climate.** Sweden's climate is diversified. The warmest month is usually July, with a mean temperature of 62° in Stockholm. February is the coldest month, with a mean average below 32° for all Sweden (25.7° at Stockholm). Average annual rainfall in the north is 16.5 inches; in the south, 22.5 inches.

## Switzerland (Republic)

(Schweiz-Suisse-Svizzera)

Area: 15,940 square miles.

Population (est. Dec. 1953): 4,910,000 (Swiss, 91.2%; German, 3.6%; Italian, 3.1%; French, .9%; others, 1.2%—figures by place of birth).

Density per square mile: 308.0.

President (1954): Rodolphe Rubattel.\*

Principal cities (est. Dec. 1953): Zürich, 409,000 (textiles, banking); Basel (canton), 205,000 (rail center, Rhine port); Geneva, 155,000 (intellectual center); Bern, 154,000 (capital).

Monetary unit: Swiss franc.

Languages: German, 71.9%; French, 20.4%; Italian, 6.0%; Romansch, 1.1%; others, .6%.



**Religions:** Protestant, 57%; Roman Catholic, 41%; Jewish, 4%; others, 1.6%.

\* The vice president ordinarily becomes president the next year. Vice president in 1954: Joseph Escher.

**HISTORY.** Swiss history is principally the story of the federation of various fiefs of the Holy Roman Empire into a single union for common defense. The process began in 1291, with the cantons of Uri, Schwyz and Nidwalden as the nucleus. Over the next 300 years, ten new cantons entered the federation, which nominally remained part of the Holy Roman Empire until the Treaty of Westphalia gave it independence in 1648.

The French revolutionary army succeeded in occupying Switzerland in 1798 and organized it as the Helvetic Republic, but Napoleon restored the federation in 1803. The Congress of Vienna (1815) declared Switzerland an independent, neutral state in perpetuity, and fixed the nation's borders as they exist today. Out of the brief Swiss civil war of 1847 came the democratic constitution of 1848, which was influenced by the constitution of the United States.

Switzerland maintained strict neutrality in World Wars I and II, during which its diplomatic delegations represented the interests of many of the belligerents.

**GOVERNMENT AND DEFENSE.** Since the adoption in 1874 of their present constitution, the Swiss have had a federation of 22 sovereign cantons. Each canton has its own legislature, executive and judiciary departments, with the right of veto over federal legislation through referendum.

The Federal Assembly has two houses—a Council of States of 44 members, two from each canton, and a National Council of 196 members elected for four-year terms. The seven members of the cabinet (Federal Council) are elected for four years by the Federal Assembly, which also elects the Swiss president from among its own members for a period of one year. The federal government is supreme in matters of war, peace and treaties, and regulates the army, railroads, postal service, mints and national bank note issues.

In peacetime, the highest Swiss army officer is a colonel. In wartime a commander in chief is named with rank of general. Since the army is a national militia, it maintains no standing forces, but military service is compulsory from the ages of 18 to 60, with an initial training period of about three months and an 11-day refresher course once a year. The force of men trained and physically fit is about 650,000. The air force has about 5,000 personnel and 400 planes.

**SOCIAL AND ECONOMIC CONDITIONS.** Primary education is compulsory, free and locally controlled. In 1951-52 primary schools had 476,331 pupils and secondary

schools had 80,207. There are seven universities, with 12,462 students in 1952-53.

Religious freedom is guaranteed under the constitution. German, Italian and French were recognized as national languages in 1874, and Romansch, a dialect of the Alpine regions, was also made official in 1937.

With nearly a fourth of its land unproductive, and with half of it in pasture or forest area, Switzerland is dependent on imports for food supply. Wheat, potatoes, fruits, oats, barley, rye, sugar beets and grapes are grown, but stockraising and dairy farming account for three-fourths of the agricultural production. In 1953 there were 1,635,000 cattle and in 1952, 190,000 sheep and 1,007,000 hogs.

Production of cheese in 1953 was 55,200 metric tons; of butter, 22,800 metric tons.

Manufacturing is the principal economic activity, with more than 40 per cent of the population being sustained by manufactures or mechanical pursuits. Industry is conducted largely in small plants using highly skilled workers. Almost all the raw materials are imported, and products consist almost exclusively of high grade, expensive commodities. In 1952 there were 11,600 factories with 548,363 workers.

Manufactures include chemical products, machines, watches, textiles, aluminum, precision instruments, lumber, shoes and fine handmade embroidery. Chief agricultural industries are the manufacture of fine cheeses and condensed milk. With its many scenic attractions, Switzerland draws the heaviest and most profitable tourist trade in Europe.

Switzerland is dependent on foreign trade for its prosperity. Trade statistics are as follows, in millions of Swiss francs:

	1951	1952	1953
Exports	4,690	4,749	5,165
Imports	5,911	5,205	5,071

In 1953 the leading customers were the U. S. (16%), Germany (12%), Italy (10%), France (7%) and Belgium (5%). Leading suppliers were Germany (25%), the U. S. (12%), France (10%), Italy (9%) and Belgium (7%). The leading exports were clocks and watches (21%), machinery (19%), textiles, including clothing (10%) and chemicals and drugs (11%).

The Rhine, navigable from Basel to the North Sea, is the principal inland waterway. Railways built over rugged terrain, entailing construction of many bridges and tunnels, total about 3,350 miles, mostly electrified. Road mileage is about 10,500.

Financial data in millions of Swiss fr.:

	1952	1953	1954*
Revenue	2,009.6	2,032.1	1,959.5
Expenditure	2,274.9	2,003.6	1,923.1

\* Budget estimate.



The debt of the Confederation alone (excluding the railway debt) was 7,758,600,-000 fr. on Dec. 31, 1953.

**NATURAL FEATURES; CLIMATE.** Most of Switzerland comprises a mountainous plateau bordered by the great bulk of the Alps on the south and by the Jura Mountains on the northwest. Its greatest length is 226 miles, greatest width, 137 miles. About a fourth of the total area of Switzerland is covered by scenic mountains and glaciers.

The country's largest lakes, Geneva, Constance (Boden See) and Maggiore, straddle the French, German-Austrian and Italian borders, respectively.

The climate is temperate and varies greatly with altitude. The coldest month (January), for example, averages 31.8° at Basel, which is 909 feet in elevation, and 16.2° at Säntis, with altitude of 8,202 feet. July is the warmest month, with a mean of 66.4° in Basel and 41° at Säntis.

## Syria (Republic)

Area: 73,587 square miles.  
Population (est. 1952): 3,433,784 (Arab, Armenian, Kurdish, Turkish, French).  
Density per square mile: 46.7.  
President: Hachem Bey el-Attassi.  
Premier: Sabri al-Assali.  
Principal cities (est. 1951): Aleppo (Alep), 371,897 (northern trading center); Damascus (Damas), 345,237 (capital); Homs, 121,044 (farming, silk); Hama, 87,-884 (Bedouin trading center).

Monetary unit: Syrian pound (£S).  
Languages: Arabic, Aramaic, French.  
Religions: Moslem (Sunni), 69.8%; Moslem (Alawite), 11.0%; Greek Orthodox, 4.6%; Armenian Orthodox, 3.5%; Moslem (Druze), 3.1%; others (Syrian Orthodox and Catholic, Greek and Armenian Catholic, Israelite, etc.), 8.0%.

**HISTORY.** Ancient Syria was conquered by Egypt about 1500 B.C., and after that by Hebrews, Phoenicians, Assyrians, Chaldeans, Persians and Greeks. From 64 B.C. until the Arab conquest in A.D. 636, it was part of the Roman Empire except during brief periods. The Arabs made it a trade center for their whole empire, but it suffered severely from the Mongol invasion in 1260 and fell to the Ottoman Turks in 1516. Syria remained a Turkish province until World War I.

A secret Anglo-French pact of 1916 put Syria in the French zone of influence. The League of Nations gave France a mandate over Syria after World War I, but the French were forced to put down several nationalist uprisings. In 1930, France recognized Syria as an independent republic, but still subject to the mandate. After nationalist demonstrations in 1939, the French high commissioner suspended the Syrian constitution. In 1941 British and

Free French forces invaded Syria to eliminate Vichy control. During the rest of World War II, Syria was an Allied base. Again in 1945, nationalist demonstrations broke into actual fighting, and British troops had to restore order. Syrian forces met a series of reverses while participating in the Arab invasion of Palestine in 1948. After Mar. 30, 1949, when the government was overthrown by Husni Zayim, there were several Army *coups d'état*. That of Nov. 29, 1951, was engineered by Col. Adib Shishakly. Elected president in July 1953, Shishakly was ousted on Feb. 25, 1954, by the army, which named Hachem Bey el-Attassi president.

**GOVERNMENT AND DEFENSE.** The 1953 constitution is based to some extent on that of the U. S., with three nominally coequal branches—executive, legislative and judicial. Executive power is vested in a popularly elected president, and legislative power in a unicameral parliament. Women have the right to vote.

The Syrian army is organized around a cadre of *troupes spéciales* transferred from French to Syrian jurisdiction in August 1945.

**SOCIAL AND ECONOMIC CONDITIONS.** Primary education is compulsory. In 1951 Syria had 1,759 primary schools with an enrollment of 260,759, and 136 secondary schools with 28,595 pupils. There is a university at Damascus.

Agriculture and animal breeding are the main industries. Only half the land is arable, and only a third is actually cultivated. Most crops require irrigation. In 1951-52 Syria grew 1,341,000 metric tons of wheat and 467,000 tons of barley. Other leading crops include sorghum, olives, cotton, grapes, lentils and tobacco. Stock-raising is important among nomads and semi-nomads.

Exports in 1953 totaled £S370,000,000; imports were £S307,000,000. Principal customers were Lebanon (24%), France (16%) and Britain (12%); leading suppliers, the U. S. (12%) and Lebanon, Britain and France (each 11%). Leading exports were ginned cotton, wheat, barley and wool.

In 1950 Syria had 3,021 miles of highway and (1949) 539 miles of railway.

**NATURAL FEATURES; CLIMATE.** Coastal Syria is a narrow plain. Back of that is a range of coastal mountains, and still farther inland is a steppe area. In the east is the Syrian Desert, and in the southeast next to Jordan is the Jebel Druze Range. The climate is subtropical, with rainfall averaging 50 inches on the coastal range but diminishing to less than four inches in parts of the desert. Summer temperatures at Aleppo range from about 75° at night to 100° during the day; winter temperatures, from freezing to 50°.

## Thailand (Siam) (Kingdom)

(Muang Thai)

Area: 198,247 square miles.

Population (est. 1953): 19,556,000 (1937: Thai, 90%; Chinese, 3.4%; Indian and Malayan, 3.4%; others, 3.2%).

Density per square mile: 98.6.

Ruler: King Rama IX.

Prime Minister: Luang Pibul Songgram.

Principal cities (census 1947): Bangkok (Krung Thep), 327,290 (capital, chief port); Khonkaen, 590,664 (trading center); Chiang Mai, 534,623 (rice, teak); Chiang Rai, 476,118 (northern trading center).

Monetary unit: Baht.

Languages: Thai (Siamese), Chinese.

Religions (census 1947): Buddhist, 89%; Moslem, 4%; Christian and others, 7%.

\* Including about 2,500,000 of Chinese descent born in Siam.

**HISTORY.** The Siamese first began moving down into their present homeland from the Asiatic continent in the 6th century A.D., and by the end of the 13th century ruled most of the western portion. During the next 400 years the Siamese fought sporadically with the Cambodians to the east and the Burmese to the west. The British obtained recognition of paramount interest in Siam in 1824, and in 1896 an Anglo-French accord guaranteed Siamese independence.

A coup on June 24, 1932, changed the absolute monarchy into a representative government with universal suffrage. Thus shorn of much power, King Prajadhipok abdicated in March, 1935, in favor of his nephew, Prince Ananda Mahidol. After five hours of token resistance on Dec. 8, 1941, Siam yielded to Japanese occupation and became one of the springboards in World War II for the Japanese campaign against Malaya. After the fall of its pro-Japanese puppet government in July, 1944, Siam pursued a policy of passive resistance against the Japanese, and on Aug. 16, 1945, after the Japanese surrender, Siam repudiated the declarations of war it had made against Britain and the U. S. in 1942.

By a treaty signed with Britain and India Jan. 1, 1946, Siam renounced all wartime acquisitions of Malayan territory and agreed that no canal linking the Gulf of Siam with the Indian Ocean would be cut across Siamese territory without British concurrence.

**RULER.** Rama IX, who was born Dec. 5, 1927, second son of Prince Mahidol of Songkhla, succeeded to the throne on June 9, 1946, when his brother, King Ananda Mahidol, died of a gunshot wound. He was married on April 28, 1950, to Princess Kitiyakara; their son, Vajiralongkorn, born July 28, 1952, is heir apparent.

**GOVERNMENT AND DEFENSE.** Thailand is a constitutional hereditary monarchy. Under the 1932 constitution, restored after the Dec. 1951 *coup d'état* to replace that

of 1949, there is a unicameral Parliament, half nominated, half elected. The government is administered by the Prime Minister and his Cabinet, who are responsible to the Parliament.

The 1937 defense act made military service compulsory for a period of two years between the ages of 18 and 30. The army had about 50,000 men in 1954. There was also a militarized police force of about 40,000 men and a fair-sized air force. The navy in 1953 had 1 coast defense ship, 4 submarines, 4 frigates and escort vessels and other smaller craft.

**SOCIAL AND ECONOMIC CONDITIONS.** Buddhist monasteries throughout Thailand control most of the elementary education in rural districts. In 1951 there were 364 government schools, with 81,340 pupils, 18,581 local public and municipal schools, with 2,660,492 pupils, and 1,297 private schools, with 267,442 pupils. The 5 institutions of higher learning had 10,557 students. Illiteracy was 68.9% in 1937.

Almost 90 per cent of the population work at agriculture. Rice (1953: 7,600,000 metric tons) is the principal crop, the staple food and the leading export. It is the basis of Thailand's whole economy and the key to its prosperity. Next most important is rubber (exports 1953: 96,830 metric tons). Other products include coconuts, corn, tobacco, cotton, sesame, sugar cane and soybeans. Livestock, poor in quality and quantity, is used mainly for hauling. Manufacturing is of little importance, except for native handicraft and food processing. Domestic business is largely controlled by Chinese.

Recent trade statistics are as follows (in millions of baht):

	1951*	1952*	1953
Exports	4,652	5,842	4,773
Imports	3,713	5,678	6,390

\* Revised.

Chief exports in 1952 were rice (47%), rubber (27%) and tin (10%). Leading customers were the U. S. and Canada (27%), Malaya and Singapore (26%) and Japan (15%); leading suppliers, the U. S. and Canada (20%), Malaya and Singapore (15%) and Hong Kong (14%).

There are good water routes which handle about 80 per cent of all internal traffic. Bangkok, the chief port, 25 miles up the Chaopaya River from the Gulf of Siam, handles about 80 per cent of the foreign trade. Railways under government ownership total 2,032 miles, and in 1950 there were about 3,600 miles of highway.

The 1953 budget estimated revenue at 4,150,000,000 baht and expenditure at 5,248,029,000 baht.

**NATURAL FEATURES AND RESOURCES;** **CLIMATE.** Thailand, about three-fourths



the size of Texas, supports most of its population in the central alluvial plain which is drained by the Chaupaya River and tributaries. There are small deposits of many important minerals, and some precious stones. Only tin, gold, tungsten and salt are in commercial production. Tin output in 1940 was 20,841 tons (10% of the world total), but production in 1953 was only 10,124 long tons (tin-in-concentrates).

Almost 70 per cent of Thailand's total land area is forested. Teak, the main forest product, covers over one-third of this area, chiefly in the northern hill country. Other forest products are thengian wood, ironwood, ebony, rattan and sticklac.

Fisheries, both ocean and river, ordinarily rank second to agriculture in product value.

The climate is monsoonal, but the full force of the monsoons is broken by the western hills. Rainfall decreases from south to north. Humidity is always high, but temperatures fall as low as 40° in the November-February cool season. Inland temperatures often rise to 100° during the hot season.

## Trans-Jordan. See Jordan

### Trieste

(Free Territory under U. N. protection)

Area: 293 square miles.

Population (est. 1953): 383,000 (Italian, 85%; Slovene and Croat, 10%; others, 5%).

Density per square mile: 1,307.2.

Principal city (census 1951): Trieste, 271,542.

Monetary unit: Lira, Yugoslav dinar.

Religion: Predominantly Roman Catholic.

Languages: Italian and Slovene (official), Croat.

Focal point of Big Power dispute during the 1946 treaty negotiations, the tiny Free Territory of Trieste on the northeastern Adriatic took existence on Sept. 15, 1947. Soviet Russia had backed Yugoslav claims for the whole Istrian peninsula, including the port of Trieste, an ideal sea outlet for Soviet-dominated Danubia. The U. S. and Britain opposed these claims. A French compromise was adopted which gave Yugoslavia the predominantly Italian cities of western Istria, including the Pola naval base; from the other predominantly Italian parts, consisting of the city and surrounding territory of Trieste, the Free Territory was formed under U. N. protection.

The territory formed part of Austria (Trieste from 1382) before World War I, and Trieste became the strategic port of central Europe and outlet for the trade of the Danube basin. By the treaty of Rapallo

(Nov. 12, 1920) between Italy and Yugoslavia, the territory along with all of Istria went to Italy as part of "Italia Irredenta." After the German collapse early in May, 1945, Tito's Yugoslav forces occupied the territory, determined to unite it with Yugoslavia. By an agreement of June 9, 1945, most of the area (197 sq. mi.) was put under temporary Yugoslav administration, but a smaller, and by far the more densely populated, part (96 sq. mi.), including the city of Trieste, was placed under Allied control.

On March 20, 1948, the U. S., Great Britain and France jointly proposed the return of Trieste to Italy. Yugoslavia countered with an offer to yield Trieste if Italy in turn would give up the city of Gorizia, but the Italian government refused.

## Turkey (Republic)

(Türkiye Cumhuriyeti)

Area: 296,185 square miles.

Population (est. 1953): 22,461,000 (Turkish, 94%; Greek, 2.2%; Bulgarian, 1.4%; Yugoslavian, .9%; others, 1.5%).\*

Density per square mile: 75.8.

President: Celâl Bayar.

Premier: Adnan Menderes.

Principal cities (census 1950): Istanbul (formerly Constantinople), 1,018,468 (chief port, commercial center); Izmir (Smyrna), 362,340 (seaport); Ankara (Angora), 286,781 (capital); Adana, 117,799 (agricultural center); Bursa, 100,007 (silk, carpets); Es-Sekir, 88,459 (trading center).

Monetary unit: Turkish pound (₺).

Languages: Turkish, Greek, Bulgarian.

Religions: Mohammedan, 98.6%; others, 1.4%.

\* 1935, by place of birth.

**HISTORY.** The Ottoman Turks first appeared in the early 13th century A.D. Under the leadership of their sultans, they gradually spread their hegemony over most of the Near East and the Balkans, capturing Constantinople in 1453 and storming the gates of Vienna in the 17th century. At the height of its power, the Empire stretched from the Persian Gulf to the frontiers of Poland and from the shores of the Caspian Sea to Oran in Algeria.

The defeat of the Turkish navy at Lepanto in 1571 by the Holy League and of Turkish forces besieging Vienna in 1683 portended the decline of Ottoman power, reducing Turkey to the status of a pawn in Europe's political maneuvers. Russia moved into the Balkans in the 18th century and made herself official protector of the Balkan Christians. Fear of a Russian drive on Constantinople prompted England and France to declare war on Russia, and the Crimean War (1853-56) followed. As a result of the Russo-Turkish war (1877-78), Bulgaria became practically independent, and Rumania and Serbia threw off their nominal allegiance to the sultan. Fur-



ther defeats were suffered by Turkey in a war with Italy (1911-12) and in the Balkan Wars (1912-13). Meanwhile, a revolt led by the Young Turks, an organization of youthful liberals, had forced the abdication of Sultan Abdul-Hamid in 1909 and established a constitutional regime.

On Aug. 2, 1914, at the outbreak of World War I, a secret alliance was signed between Germany and Turkey, whose army was advised by a German military mission, and in September the Allies declared war on Turkey. Turkish forces successfully defended the strategic Dardanelles, but British forces seized Palestine, Mesopotamia and Syria; and the Hejaz revolted. By 1918 Allied forces held the territory along the Dardanelles and the Bosphorus, and later Greek forces occupied Smyrna and vicinity.

In 1919 the new Nationalist party, headed by Mustafa Kemal, was organized to resist the Allied occupation, and in 1920 a National Assembly elected Mustafa Kemal president of both the assembly and the government. Under his leadership, the Nationalist government was recognized by foreign powers, the Greeks were driven out of Smyrna, and other Allied forces were withdrawn. The present Turkish boundaries (with the exception of Alexandretta, ceded to Turkey by France in 1939) were fixed by the Treaty of Lausanne (1923) and later negotiations. The caliphate and sultanate were separated and the sultanate abolished on Oct. 1, 1922. On Oct. 29, 1923, Turkey formally became a republic with Mustafa Kemal, who took the name of Kemal Atatürk, as its first president. He carried out an extensive program of reform, modernization and industrialization.

The Montreux Convention (1936) gave Turkey sole responsibility for the defense of the area. On Aug. 7, 1946, Soviet Russia proposed in a note to Turkey that defense of the Straits be made a joint Turkish-Soviet responsibility under a revision of the Montreux Convention, but the proposal was opposed by both Britain and the U. S., as well as by Turkey.

General Ismet İnönü was elected to succeed Kemal Atatürk on the latter's death in 1938 and was re-elected in 1939, 1943 and 1946, but was defeated in 1950 and succeeded by Celâl Bayar. On Oct. 19, 1939, a mutual assistance pact was concluded with Britain and France. Turkey followed a neutral course during most of World War II, but on Feb. 23, 1945, she declared war on Germany and Japan, but took no active part in the conflict. After the abrogation of the Soviet-Turkish non-aggression pact in March, 1945, Turkey was subjected to Soviet pressure for a share in the control of the Dardanelles. To assist Turkey in effecting modernization necessary for the preservation of its national integrity, the U. S. in 1947 agreed

to advance \$100,000,000, all of which was to be used for the armed forces or to a lesser extent for economic projects directly related to Turkish defense. Turkey has also received aid under the European Recovery Program. It became a full member of the North Atlantic Treaty organization in 1952.

**GOVERNMENT AND DEFENSE.** The constitution, as amended in 1937, defines the state as "republican, nationalist, populist, étatist, secular, and revolutionary." The president is chosen from the deputies of the National Assembly; his term of office is identical with the life of each Assembly. The 541 members of the Assembly are elected by universal suffrage for a term of four years. According to the Turkish constitution, the Assembly exercises the executive power through the president and the Council of Ministers (cabinet) which is appointed by him.

The Republican People's party, which had been in power since 1923, was overwhelmingly defeated in free elections held May 14, 1950, by the Democratic party. The latter was retained in office by an even wider margin in elections held May 2, 1954, in which it won 503 seats in the Assembly. Centralization is the basis of the governmental system. The pre-republic judicial system, based on Sunni Moslem law, was replaced in 1926 by a new system based on the Swiss civil code.

**Defense.** Military service is compulsory from 20 to 45; the initial training period is three years. The strength of the army, mobilized since 1939, was about 400,000 in 1953.

Large purchases of modern matériel were made during World War II, and additional armaments were received from the U. S. after the war. The air force, under the direct control of the Turkish General Staff, had a strength of about 1,000 planes in 1950. The navy has 1 battle cruiser, 10 fleet destroyers and 10 submarines, in addition to smaller craft, including a number of former U. S. and British minesweepers. A regimental combat team of 5,000 men was dispatched to Korea in 1950.

## **SOCIAL AND ECONOMIC CONDITIONS.**

**Education.** Elementary education is nominally obligatory from 7 to 12. Only 24.2% of the whole population could read and write in 1945, but 43.2% of those 7 to 16 were literate in 1950. In 1951-52 there were 17,428 primary schools with 1,616,626 pupils and 494 secondary schools and *lycées* with 90,356 pupils. There were 34 institutions of higher learning with 27,585 students. The Latin alphabet replaced the Arabic script in 1928.

**Agriculture and Industry.** Agriculture is the principal economic activity, engaging about 65 per cent of the population. Only about 20 per cent of the land is under

cultivation, but the government has made great efforts to modernize and improve farming. The most important cash crop is tobacco (1953: 122,000 metric tons). Cotton (1953: 140,000 metric tons, ginned) is grown in the south of Asia Minor while figs come exclusively from the Smyrna region. Principal grain crops, with 1953 production in metric tons, are wheat, 8,134,000; barley, 3,500,000; oats, 413,000; and corn, 845,000. Turkey is a leading exporter of olive oil; the Brusa region and the Ionian coast are the principal areas of cultivation. Opium poppies are grown in the Smyrna, Malatia and Tokat regions.

Turkey is rich in livestock. The most important animal is the goat, of which there were 21,908,000 in 1951, including the valuable Angora which thrives on the uplands of the plateau. There were also (in 1952) 10,396,000 cattle, 25,845,000 sheep\* and 1,173,000 horses. Total wool production in 1952 was 30,000 metric tons, clean basis.

Staple industries have been established in iron, steel, textiles, paper, glass, sugar and cement. In 1953, 216,000 metric tons of pig iron and 162,000 tons of steel were produced. A large proportion of the factories are government-operated. Istanbul is the major industrial area.

*Trade.* Turkey's foreign trade was as follows, in millions of Turkish pounds:

	1951	1952	1953
Exports	879.4	1,016.2	1,108.9
Imports	1,125.8*	1,556.6*	1,491.1*

\* Includes military equipment imported under U. S. military assistance program.

Principal customers in 1953 were the U. S. (23%), western Germany (15%), Italy (13%) and Britain (7%). Leading suppliers were western Germany (21%), Britain (14%), the U. S. (11%) and Italy (7%). Chief exports were tobacco (22%), raw cotton (20%), wheat (15%) and chrome (7%); leading imports, machinery, iron, steel, fuel and oil.

*Communications and Finance.* In June 1953, Turkey had a merchant fleet of 255 vessels (100 tons and over) aggregating 478,269 gross tons. The length of railways (1952) was 4,718 miles. Highway mileage (state and provincial) was 30,583 in 1951.

Recent public finance data are as follows, in millions of Turkish pounds:

	1952-53*	1953-54†	1954-55†
Revenue	2,126	1,960	2,289
Expenditure	2,249	2,123	2,288

\* Provisional. † Budget estimate.

The public debt, consolidated and floating on December 31, 1953, was £T2,304,-297,000.

**NATURAL FEATURES AND RESOURCES;**  
**CLIMATE.** Turkey is divided into two

natural areas by the historic waterway formed by the Dardanelles, the Sea of Marmara and the Bosphorus.

Turkey in Europe comprises an area about equal to the state of Massachusetts. It is hilly country drained by the Maritsa River and its tributaries. Almost all the population is concentrated in and near the two important towns, Istanbul (Constantinople) and Edirne (Adrianople). Turkey in Asia, or Anatolia, about the size of Texas, is roughly a rectangle in shape with its short sides on the east and west. Its center is a treeless plateau rimmed by mountains.

*Minerals and Forests.* Turkey's rich mineral resources are still comparatively unexploited. Deposits of copper in the large field at Arghana, near the Iraq-Syrian frontier, have been estimated at 1,600,-000 tons (1953 output: 23,275 metric tons). Turkey is also relatively rich in coal, with large deposits in the Ereğli region on the Pontic coast some 150 miles from Istanbul (1953 output: 5,650,000 tons). A virtual world monopoly is enjoyed in meerschaum, found in the Eskişehir district. Other important minerals of Turkey include chrome, manganese ore, iron ore, emery and antimony.

*Climate.* Along the coast from Antioch to the Dardanelles the climate is Mediterranean, with rainy winters and dry summers. Thence to the Bosphorus it is transitional to the type of climate with heavy year-round rainfall. Semitropical fruits and tea may be grown in the region beyond Trebizond on the Black Sea. The western plateau has a harsh steppe climate, with cold winters, hot summers and scanty rainfall, while the eastern plateau exhibits a transition from steppe to alpine climate. Istanbul has a mean annual temperature of 57° (maximum 99°, minimum 17°) and average yearly rainfall of 28.3 inches. Rainfall occurs approximately one day out of three.

## Union of Soviet Socialist Republics

Area (est.): 8,473,444 square miles\* (8,173,666 in 1938).

Population (est. 1952): 207,000,000\* (170,467,186 by 1939 census) (Great Russian, 58.4%; Ukrainian, 16.6%; Byelorussian, 3.1%; Uzbek, 2.9%; Tartars, 2.5%; Kazakhs, 1.8%; Armenian, Azerbaijani, Georgian, each 1.3%; more than 100 others, 10.8%).

Density per square mile. 24.4\*

Chairman of Presidium of Supreme Council: Klementi E. Voroshilov.

Premier: Georgi M. Malenkov.

Principal cities (census 1939): Moscow, 4,137,018 (capital); Leningrad, 3,191,304



(Industrial center, shipbuilding); Kiev, 846,293 (Industrial center, Ukraine); Khar'kov, 833,432 (Iron and steel, coal); Baku, 809,347 (oil center, Azerbaijan); Gorki, 644,116 (iron and steel); Odessa (1937), 604,223 (chief Black Sea port); Tashkent, 585,005 (textiles, tobacco); Tiflis (Tbilisi), 519,175 (building materials, leather); Rostov on Don, 510,253 (grain, shipbuilding).

Monetary unit: Rouble.

Languages: See Population.

Religions: Russian Orthodox (predominant), Mohammedan, Roman Catholic, Jewish, Lutheran.

\* Including acquisitions since 1939.

**HISTORY.** The history of Russia begins with the perhaps legendary figure of the Viking Rurik, who according to tradition came to Russia in A.D. 862 and founded the first Russian dynasty in Novgorod. The various tribes were united by the spread of Christianity in the 10th and 11th centuries; Vladimir "the Saint" was converted in 988. During the 11th century the grand dukes of Kiev held such centralizing power as existed. In 1240 Kiev was destroyed by the Mongols, and the Russian territory was split into numerous smaller dukedoms, out of which three large centers emerged—Galicia, Moscow and Novgorod. The early dukes of Moscow extended their dominions through their office of tribute collector for the Mongols.

In the late 15th century, Ivan III, the reigning duke, acquired the rival kingdoms of Novgorod and Tver and threw off the Mongol yoke. Ivan IV, the Terrible (1533-84), first Muscovite duke to assume the title of tsar, is considered to have founded the Russian State. He crushed the power of rival princes and boyars (great land-owners), but Russia remained largely medieval until the reign of Peter the Great (1682-1725), grandson of the first Romanov tsar, Michael (1613-45). Peter effected extensive reforms aimed at Westernization, and through his defeat of Charles XII of Sweden at the Battle of Poltava (1709), he extended Russia's boundaries to the west. Catherine the Great (1762-96) continued Peter's Westernization program and also expanded Russian territory, acquiring the Crimea and part of Poland. During the reign of Alexander I (1801-25), Napoleon's attempt to subdue Russia was defeated (1812-13), and new territory was gained, including Finland (1809) and Bessarabia (1812). Alexander was the originator of the Holy Alliance which crushed for a time Europe's rising liberal movement. Between the Napoleonic Wars and World War I, a few reforms were introduced, but the autocratic power of the tsars remained unchanged.

During the reign of Alexander II (1855-81), Russia's borders were pushed to the Pacific and into central Asia. Serfdom was abolished in 1861, but heavy restric-

tions were imposed on the emancipated class. Revolutionary strikes following Russia's defeat in the war with Japan forced Nicholas II (1894-1917) to grant a representative national body (Duma), elected by narrowly limited suffrage. It met for the first time in 1906. Nicholas continued in his reactionary course, however, and the overwhelmingly liberal Duma had little or no influence in the running of the government.

World War I demonstrated the corruptness and inefficiency of the tsarist regime, although the call of patriotism held the poorly equipped army together for a time. Disorders broke out in Petrograd (now Leningrad) in March, 1917, and, following the winning over of the Petrograd garrison, the revolution was in full swing. Nicholas was forced to abdicate under pressure from the Duma and was later killed by the revolutionists. A provisional government was formed, composed of both conservative and radical elements. This government, under the successive premier-ships of Prince Lvov and Alexander Kerensky, a Menshevik or moderate socialist, soon lost ground to the radical or Bolshevik wing of the Socialist Democratic Labor Party. Finally, on Nov. 7, 1917, came the Second Revolution, engineered by Nikolai Lenin and Leon Trotsky and their small but well-disciplined Bolshevik following in the Petrograd Soviet. The government was turned over the next day to the Congress of Soviets (councils of soldiers, peasants and workers), which vested the government in a Council of People's Commissars with Lenin as premier and Trotsky as foreign minister. The humiliating Treaty of Brest-Litovsk (March 3, 1918) concluded the war with Germany, but civil war and intervention by foreign powers prevented the new Communist government from gaining control of all Russia until 1920. A brief war with Poland occurred in 1920, but it resulted in Russian defeat and withdrawal.

On July 6, 1923, the vast territory under Soviet rule—previously an inchoate mass whose constituent parts were changing constantly—became the Union of Soviet Socialist Republics, which was formed by the union of the Russian S.F.S.R. and the Ukrainian, Byelorussian and Transcaucasian S.S.R.'s.

The sudden death of Lenin (Jan. 21, 1924) precipitated an intraparty struggle between the group led by Joseph Stalin, general secretary of the party, and the opposition, led by Trotsky, which favored not only swifter socialization at home but fomentation of revolution abroad. In 1927, Trotsky and other opposition leaders were expelled from the party and exiled. The first Five-Year Plan (1928-32) called for gradual, progressive increase in industrial and agricultural production. Its collectiv-



zation program was opposed by the Kulaks, or wealthier peasants, who were vigorously suppressed. Purges carried out in 1936-38 removed many prominent leaders of the Revolution and top Russian army officers.

Soviet foreign policy—first featured by friendship with Germany and antagonism toward England and France and then, after Hitler's rise to power in 1933, by participation in the League of Nations and an anti-Fascist program—took another abrupt turn on Aug. 24, 1939, with the signing of a Soviet-German nonaggression pact. Territory seized from Poland (Sept., 1939) became part of the Ukrainian and Byelorussian S.S.R.'s; that secured from Finland at the conclusion of the Finnish war of 1939-40, part of the Karelian S.S.R. set up March 31, 1940; that secured from Rumania (Bessarabia and northern Bukovina), part of the Moldavian S.S.R. set up Aug. 2, 1940; and finally the formerly independent states of Estonia, Latvia and Lithuania, occupied in June, 1940, were absorbed into the U.S.S.R. as the 14th, 15th and 16th Soviet Republics. The latter annexations have not been recognized by the United States, Britain, or the majority of other nations.

Immediately following the German attack (June 22, 1941), all necessary powers for the defense of the state were vested in the State Defense Council headed by Stalin, who had taken over the post of premier on May 6. The Germans quickly seized approximately 500,000 square miles of Soviet territory, but Soviet forces resisted stubbornly, aided by increasing amounts of matériel from the U. S. and Britain. The great Soviet counteroffensive in the Stalingrad area (Nov., 1942-Feb., 1943) marked the turning point. Soviet troops gradually pushed the Nazis back and unleashed their final great offensive on Jan. 12, 1945. The nonaggression pact with Japan (1941) was denounced in April, 1945, and, following the declaration of war on Japan (Aug. 8, 1945), Soviet Far Eastern forces quickly occupied Manchuria, Karafuto and the Kuriles.

After the war, with its eastern European satellites drawn together into a solid bloc in opposition to the western democracies, the Soviet Union launched a full-scale political offensive against the non-Communist world, particularly the United States and Great Britain.

Efforts to discredit Anglo-U. S. influence were initially a failure. The western powers countered the Soviet blockade of Berlin with a highly effective "air-lift," completed the unification of western Germany and went on to unite western Europe into a wall of opposition to Communist aggression through the vehicle of the North Atlantic Pact.

Evidence of an atomic explosion in the Soviet Union in the summer of 1949 was reported by President Truman on Sept. 23, 1949.

Stalin died on Mar. 6, 1953. The next day Georgi M. Malenkov succeeded him as premier. Malenkov's chief rivals for power—L. P. Beria, V. M. Molotov, N. A. Bulganin and L. M. Kaganovich—were named first deputy premiers. The first evidence of the expected intraparty struggle for power was revealed by the announcement on July 10, 1953, of the purging of Beria. He was executed on Dec. 23, 1953. His demise was accompanied by a rise in importance of N. S. Khrushchev, first secretary of the Communist party.

**GOVERNMENT.** Under the constitution of 1936, the Soviet Union is "a Socialist State of Workers and Peasants" whose highest organ is the Supreme Council of the Union, which exercises legislative authority. It consists of two co-equal Houses—the Council of Nationalities, in which each constituent republic has 25 representatives, each autonomous republic 11, each autonomous oblast five, and each national okrug one (total 638); and the Council of the Union, elected on a nationwide basis with one representative for each 300,000 of population (total membership 678). All representatives are elected for four-year terms; the last election was held on Mar. 14, 1954. Elections amount to a blanket endorsement (or rejection) of a single list of candidates already nominated by the Communist Party, youth organizations, collective farms and trade unions. The only election in the Western sense of the word takes place in the selection of the nominees by these groups. All citizens over the age of 18 are enfranchised.

The Presidium of the Supreme Council acts as a directive body between the sessions of the Supreme Council. It has a chairman (sometimes referred to as the Soviet president), 16 vice chairmen (one for each constituent republic), a secretary and 24 members, all elected by the Supreme Council.

The highest executive and administrative power is exercised by the Council of Ministers (formerly People's Commissars) appointed by the Supreme Council and headed by a chairman (premier) and 14 vice chairmen. It issues decrees and executive orders on the basis of laws in operation and supervises their execution. The administrative machinery is necessarily vast and complicated, since it is responsible not only for the ordinary administrative functions of government, but also for the operation of enterprises which are state-owned.

The 16 constituent republics of the Union are as follows: the Russian Soviet Federated Socialist Republic (capital:

Moscow) covering about 80 per cent of the total area; the Ukrainian S.S.R. (Kiev); Byelorussian S.S.R. (Minsk); Armenian S.S.R. (Erivan); Azerbaijan S.S.R. (Baku); Georgian S.S.R. (Tiflis); Turkmen S.S.R. (Ashkhabad); Uzbek S.S.R. (Tashkent); Tadzhik S.S.R. (Stalinabad); Kazakh S.S.R. (Alma Ata); Kirghiz S.S.R. (Frunze); Karelo-Finnish S.S.R. (Petrozavodsk); Moldavian S.S.R. (Kishinev); Lithuanian S.S.R. (Vilnius); Estonian S.S.R. (Tallinn) and Latvian S.S.R. (Riga).

Postwar territorial acquisitions include the Carpatho-Ukraine (12,617 sq. mi.) obtained from Czechoslovakia June 29, 1945, incorporated into the Ukrainian S.S.R. as Zakarpatskaya Oblast; the Republic of Tannu Tuva in central Asia (64,000 sq. mi.) incorporated early in 1945 into the R.S.F.S.R. as the Tuvinian Autonomous Oblast; Karafuto or southern Sakhalin (13,935 sq. mi.) and the Kurile Islands (3,944 sq. mi.), occupied by Soviet troops in Aug., 1945, and incorporated into the Khabarovsk Krai of the R.S.F.S.R.; the northern part of eastern Prussia (about 7,000 sq. mi.), placed under *de facto* Soviet administration at the Potsdam Conference and incorporated into R.S.F.S.R. as Kaliningrad (formerly Königsberg) Okrug; the Petsamo district of Finland, obtained *de jure* under the 1947 treaty and incorporated into the Murmansk Oblast of the R.S.F.S.R.; and Poland east of the Curzon Line (69,860 sq. mi.), under terms of the Soviet-Polish treaty of Aug. 16, 1945, incorporated into the Ukrainian and Byelorussian S.S.R.'s.

**COMMUNIST PARTY.** The only political party permitted to exist in the Soviet Union is the All-Union Communist Party, which claimed 6,882,145 members in Oct. 1952. Its organization parallels the entire governmental and economic structure of the country and guides all important action through instructions from the central organs to Party members who occupy most of the important political and economic positions. Its highest organ is the All-Union Party Congress, which meets irregularly. The Congress elects a Central Committee (125 members, 110 alternates), which in turn elects (1) an executive body (presidium) with 10 members, (2) a secretariat headed by a first secretary (N. S. Khrushchev) and (3) a Committee of Party Control.

Full members of the presidium of the Central Committee in July 1953 were G. M. Malenkov, V. M. Molotov, K. E. Voroshilov, N. S. Khrushchev, N. A. Bulganin, L. M. Kaganovich, A. I. Mikoyan, M. A. Saburov, M. G. Pervukhin, (one vacancy); alternates, N. M. Shvernik, P. K. Ponomarenko, L. G. Melnikov, M. D. Bagirov.

In Sept., 1947, the Cominform (Communist Information Bureau), a Soviet-

dominated organization composed of representatives from nine national Communist parties, was created to replace the Comintern (dissolved in 1943) as an instrument in the promotion of world-wide communism.

**DEFENSE.** The land, air and sea forces are under control of the Defense Ministry. Military service is compulsory; the initial training period varies from 2 to 5 years. The armed forces, which were estimated to have reached a peak of more than 15,000,000 in 1945, numbered approximately 4,750,000 men in 1954. The strength of the army, including MVD and MGN troops (secret police organizations with paramilitary formations), was about 3,300,000, organized in more than 200 line divisions, not all of which were at full strength (10,000), with supporting troops. The air force had about 750,000 men and 23,000 planes; the navy, about 700,000 men. More than 500,000 troops were stationed outside Soviet borders, including 30 divisions in eastern Germany. At least 700,000 men were estimated to be located in Siberia and the Soviet Far East.

Information about the Red fleet is as vague as that about the army and air force. In 1954, it was believed to have 3 battleships, 20 cruisers, 3 coast defense ships, 100 destroyers, 64 frigates and escort vessels, 370 submarines, and large flotillas of coastal and river craft, patrol vessels, minesweepers and various other small ancillary craft. An extensive naval-construction program was made part of the fourth Five-Year Plan.

#### **SOCIAL AND ECONOMIC CONDITIONS.**

**Education.** The school system throughout the country is based upon uniform text books and the same syllabus, although a number of hours are allowed for native language, literature and history in the non-Russian schools. All schools are state controlled, and compulsory education begins at the age of seven. Coeducation is being abolished and separate schools established for boys and girls. The boys' curriculum stresses military training; the girls', housework. Enrollment in primary and secondary schools in 1953 was 37,900,000. Under the Defense Ministry are the newly established Suvorov military schools for the training of future officers. In 1953, 887 colleges and institutions of higher learning had 1,400,000 students. Literacy in Russia was estimated at over 90% in 1950.

**Agriculture.** Formerly an agricultural country, the Soviet Union has grown since about 1920 into an industrial-agricultural power, with agriculture making great advances at the same time. The total area under cultivation was 259,500,000 acres in 1913, 291,600,000 acres in 1929, and 391,000,000 acres in 1950.



# **PRODUCTION OF GRAIN CROPS**

(in millions of bushels)

Grain	1935-39 average	1949	1950
Wheat	1,124	1,100	1,100
Rye	885	950	...
Barley	425	310	325
Maize	170	140	...
Oats	1,165	775	750

# **ANIMAL INDUSTRY (millions of head)**

Animal	1933	1947	1953
Horses	16.6	11.9	15.3
Cattle	38.4	52.0	56.6
Sheep and goats	50.2	84.7	109.9
Pigs	12.1	13.4	28.5

The Union's diverse climate permits the growing of the most varied crops, ranging from the temperate to the subtropical. Under the fourth Five-Year Plan, grain production increased to 124,700,000 metric tons in 1950 (a 5% increase over the pre-war average), sugar beets to 24,300,000 (14% increase), and raw cotton to 3,750,000 (60% increase). Further increases were projected under the fifth Five-Year Plan (1951-55), details of which were revealed in Aug. 1952.

**Industry.** Almost all industry in the Soviet Union is carried on by organizations owned or controlled by the state. About 80 per cent of the total state industries is controlled by 291 large trusts. The industrialization of the country has been a major objective of its leaders. Completion of the first two Five-Year Plans (1928-32, 1933-37) and of most of the third (1937-42) saw a great increase in the volume and versatility of Soviet industry.

The large-scale evacuation of plants to the East and the construction of new plants there during World War II, coupled with the eastward orientation of industry prior to the war, has shifted the balance to newly developed regions in Central Asia and Siberia from the Moscow-Leningrad area and the Ukraine. The new regions are now the center of Soviet industrial power, accounting for almost all magnesium and aluminum production, and more than 60 per cent of the pig iron and steel production. The production of consumers' goods continues to be subordinate to the production of heavy capital equipment.

Large increases in production were reported under the fourth Five-Year Plan, which ended in 1950. Pig-iron production in 1952 was about 25,000,000 metric tons; steel production, about 38,000,000 tons.

The fifth Five-Year Plan projected substantial increases by 1955 over 1950 levels, including pig iron 76%, steel 62%, rolled metal 64%, metallurgical equipment 85%, synthetic rubber 82%, tractors 19%, cotton

textiles 61% and woolen textiles 54%. In order to achieve the further development of industrial production, state capital investment in industry was to be doubled as compared with 1946-50.

It was officially reported in early 1954 that during the first three years of the plan industrial production had increased by 45%.

**Foreign Trade.** Soviet foreign trade is a state monopoly, and foreign goods are purchased in accordance with an over-all plan conducted under the supervision of the Foreign Trade Ministry. Connected with the Ministry are a number of export-import and transport combines.

No official trade statistics have been issued since 1938. Exports were unofficially placed at \$1,141,000,000 in 1950; imports, \$1,049,000,000. Chief customers were European satellites of the U.S.S.R., 71.3%; Germany 8.3%; Britain 7.5%; and the U. S. 3.5%; leading suppliers, European satellites 60.6% and Germany 14.5%. Main exports are grain, timber, ore, non-ferrous metals, raw cotton and industrial equipment; main imports, heavy engineering equipment, electrical equipment and precision instruments, ships, rubber, tin and wool.

**Communications.** According to *Lloyd's Register* of shipping, the merchant marine on June 30, 1953, had 1,049 ships (100 tons and over) aggregating 2,292,330 tons. Merchant ship construction was subordinate to naval construction under the fifth Five-Year Plan. The principal ports include Leningrad on the Gulf of Finland, Murmansk and Archangel on the Arctic Ocean and White Sea, respectively; Vladivostok on the Sea of Japan; and the Black Sea ports of Odessa, Sevastopol, Novorossisk and Batum. River and canal transport is extremely important. In 1950 there were about 75,000 miles of navigable rivers and canals.

Railway mileage was estimated in 1950 at 70,000, of which about a third was double-tracked. Highway mileage (1945) totaled 849,520, but only 7,146 mi. (less than in Vermont) were reported as all-weather roads in 1949. The fifth Five-Year Plan called for a 150% increase in the mileage of new railway lines and a 60% increase in doubletracking. New construction in Siberia and reconstruction in the Baltic republics was to be emphasized.

Air traffic is assuming great importance, especially in the central Asiatic portion of the U.S.S.R. Prior to World War II, the network of air routes covered 69,845 miles; in 1950 the estimated length was 109,000 miles, over which some 2,000,000 passengers were carried (300,000 in 1938). Moscow is connected with the capitals of all the Union republics by daily air service, and there



are regular services to the Far East and Europe. No foreign air routes have been allowed to enter the U.S.S.R.

*Finance.* Recent financial data are as follows, in billions of roubles:

	1951	1952	1953*
Revenue	468.0	497.7	543.3
Expenditure	441.3	460.2	530.5

\* Budget estimate.

The budget includes charges for the financing of industry, transportation, agriculture and commerce—items which ordinarily are handled through private channels in other countries.

#### NATURAL FEATURES AND RESOURCES;

*CLIMATE.* The U.S.S.R. is the largest unbroken political unit in the world, occupying more than one-seventh of the land surface of the globe. The greater part of its territory is a vast plain stretching from eastern Europe to the Pacific Ocean. This plain, relieved only occasionally by low mountain ranges (notably the Urals), consists of three zones running east and west: (1) the frozen marshy tundra of the Arctic; (2) the more temperate forest belt; and (3) the steppes or prairies to the south, which in southern Soviet Asia become sandy deserts. The topography is more varied in the South, particularly in the Caucasus between the Caspian and Black Seas, and in the Tien-Pamir mountain system bordering Afghanistan, Sinkiang and Mongolia. Mountains (Stanovoi and Kolyma) and great rivers (Amur, Yenisei, Lena) also break up the sweep of the plain in Siberia.

*Minerals.* The U.S.S.R. is probably the richest country in the world in mineral resources, containing deposits of almost every known mineral. It ranks among the top producing nations in coal, chromite, iron ore, petroleum, gold, copper, manganese and other products. The richest mineral region is that of the Ural Mountains, which lacks only good coking coal. Total coal and lignite production in 1953 was estimated at 320,000,000 metric tons; iron ore (1952), perhaps 50,000,000 tons. Other production estimates included aluminum (1952) 275,000 short tons; copper (1953) 334,500 short tons; lead (1953) 202,000 short tons; platinum (1948) 125,000 oz.; tin (1949) 9,000 metric tons; zinc (1953) 233,500 short tons; gold (1952) 10,000,000 oz. Petroleum production was estimated at 375,000,000 barrels in 1953. Uranium deposits are believed to exist in the Soviet Union.

*Forests.* With a forested area of about 2,500,000,000 acres, the U.S.S.R. possesses a large proportion of the world's timber reserves. Most of the forested area is in Siberia, but there are also valuable stands in the Caucasus. Plans were made late in 1948 for the planting of huge forest belts

60 to 90 mi. wide in the southern steppes to protect fertile food-producing areas from the dry winds of the central Asian and Caspian deserts.

*Fisheries and Furs.* The rivers, lakes and surrounding seas (except the Black Sea) are rich in fish; the catch averages more than 1,500,000 tons annually. The acquisition of former Japanese fisheries in Karafuto and the Kuriles greatly increased output of the Far Eastern fish industry. Trapping is an important secondary industry, especially in eastern Siberia.

*Climate.* The climate necessarily is varied, but for the most part is continental. In general the climate of the northern and central regions is characterized by long, cold winters and by summers which are shorter and cooler than those in the northern part of the United States. Siberia has the coldest winters in the world; the January average at Verkhoyansk is  $-59^{\circ}$ . In the southern regions the climate varies between temperate and subtropical. The Uzbek, Turkmen and Kazakh S.S.R.'s are largely desert and semi-desert areas. In the central belt rainfall is fairly uniform, averaging about 15 inches east of the Urals and 20 inches to the west. In the tundra to the north it drops to about 8 inches and to 4 inches in the southern regions.

Average daily low temperature at Moscow is about  $5^{\circ}$  (high,  $14^{\circ}$ ) in January, which is the coldest month; average daily high is  $71^{\circ}$  during July, which is the warmest month.

## Uruguay (Republic)

### (República Oriental del Uruguay)

Area: 72,172 square miles.

Population (est. 1953): 2,525,000 (predominantly of European extraction).

Density per square mile: 34.9.

President of Federal Council: Andrés Martínez Trueba.

Principal cities (est. 1948): Montevideo, 850,000 (capital); Paysandú, 50,000 (meat packing); Salto, 48,000 (cattle raising); Mercedes, 33,000 (farming center).

Monetary unit: Peso.

Language: Spanish.

Religion: Roman Catholic.

*HISTORY.* Juan Díaz de Solís, a Spaniard, discovered Uruguay in 1516, but the Portuguese were first to settle it when they founded Colonia in 1680. After a long struggle, Spain wrested the country from Portugal in 1778. Uruguay revolted against Spain in 1811, only to be conquered in 1816-20 by the Portuguese from Brazil. Independence was re-asserted with Argentine help in 1825, and the republic was set up in 1830. There followed a long period of factional strife between two groups still

in existence at the present time—the Blancos and the Colorados. Andrés Martínez Trueba became President of the Federal Council effective Mar. 3, 1952.

**GOVERNMENT AND DEFENSE.** Under the 1934 Constitution, as amended in 1951, the executive power is exercised by a Federal Council of 9 members, 6 of the majority and 3 of the minority party, normally popularly elected for 4-year terms. There is a bicameral Congress composed of a 99-member Chamber of Deputies and a 31-member Senate elected for 4 years. All literate citizens may vote, including women, who may also sit in congress.

Service in the army (1950 strength: 26,000) is voluntary, but national guard service is compulsory in wartime. There is a police force of about 5,500, and a small air force. The navy has a 1,150-ton sloop, a surveying vessel and several smaller craft.

**SOCIAL AND ECONOMIC CONDITIONS.** Uruguay's illiteracy rate is 35 per cent; primary education is compulsory, and all education is free. There was in 1950 a total of 212,509 pupils in 1,722 public schools and 11,948 students in the university at Montevideo. Uruguay's high percentage of white population includes many foreign-born, mostly Italian and Spanish, but there are some Brazilian, Argentine and French.

Cattle, sheep, meat and wool dominate the Uruguayan economy. With nearly 80 per cent of its grassy land devoted to grazing, there were in 1951, 23,408,642 sheep and 8,665,656 cattle. Wool production in 1953 was 95,000 short tons, greasy. With only about 5 per cent of the land cultivated, a third of this grows wheat, the chief crop (1952-53: 426,525 metric tons). Other crops are corn, flax for linseed, oats, potatoes, beans, fruits, tobacco, alfalfa and grapes. Wine production in 1953 was about 19,000,000 U. S. gallons.

Uruguay slaughters more than two million head of cattle and sheep a year, and meat processing is the largest manufacturing industry. There are many modern plants for chilling or freezing meat, and plants for liquid extract of beef.

During World War II Uruguay doubled its foreign trade, and most of the increase went to the U. S. Recent data are as follows (in millions of U. S. dollars):

	1951	1952	1953
Exports	236.3	208.9	269.8
Imports	315.6	236.6	195.2

In value, wool was the chief export (47%) in 1953, followed by beef and mutton (16%) and manufactures (15%). Chief customers were Britain (31%), the U. S. (18%) and Germany (7%). The U. S. (18%) and Britain (13%) were the princi-

pal suppliers. Leading imports included machinery, vehicles, gasoline, textiles and sugar.

Railway mileage in 1949 totaled 1,874. Prior to 1948, 90 per cent was British-owned, but in that year the government purchased complete interest. Road mileage was 26,000 in 1948, of which 3,051 ml. were paved.

The 1953 budget provided for expenditure of 463,000,000 pesos. The funded public debt on Dec. 31, 1952, was 965,000,000 pesos.

**NATURAL FEATURES; CLIMATE.** Uruguay, a low rolling plain in the south and a low plateau in the north, has a 120-mile Atlantic shore line, a 235-mile frontage on the Río de la Plata, and 270 miles on the Uruguay River, its western boundary. The climate is good. Average summer temperature in January and February is 71°, and average winter temperature in July is 50°. Frost is almost unknown. Average rainfall is 35 inches, heaviest in the autumn.

## Vatican City State (Stato Città Vaticana)

Area: 108.7 acres.  
Population (est. 1952): 947 (Italian, 85%; Swiss and others, 15%).  
Ruler: The Supreme Pontiff, Pius XII.  
Monetary unit: Lira.  
Languages: Latin, Italian.  
Religion: Roman Catholic.

The Vatican City State, sovereign and independent, is situated on the Vatican hill on the right bank of the Tiber in northwest Rome. The area has been intimately associated with the history of the Roman Catholic Church since the time of the martyrdom of St. Peter. From it the Pope exercised temporal sway for many centuries over a large part of central Italy; in 1859 the Papal States comprised an area of some 17,000 square miles. During the struggle for Italian unification, from 1860 to 1870, most of this area became part of Italy.

By an Italian law of May 13, 1871, the temporal power of the Pope was abrogated, and the territory of the Papacy was confined to the Vatican and Lateran palaces and the Villa of Castel Gandolfo. The Popes consistently refused to recognize this arrangement, and by the Lateran Treaty of Feb. 11, 1929, between the Vatican and the Kingdom of Italy, the exclusive dominion and sovereign jurisdiction of the Holy See over the city of the Vatican was again recognized, thus restoring the Pope's temporal authority over the area. Accompanying the treaty were conventions regulating the position of the



Catholic Church in Italy and providing for reimbursement to the Vatican in final settlement of the claims of the Holy See against Italy for the loss of temporal power in 1870-71.

The Supreme Pontiff is Pius XII (Eugenio Pacelli), born at Rome, March 2, 1876, proclaimed cardinal in 1929, and elected Pope on March 2, 1939. He was crowned on March 12.

The Pope has full legal, executive and judicial powers. Executive power over the area is in the hands of a governor appointed by the Pope and exclusively responsible to him.

The College of Cardinals is the Pope's chief advisory body, and upon his death the cardinals elect his successor for life. The cardinals themselves are created for life by the Pope. When complete, the College consists of 70 members.

The central administration of the Roman Catholic Church throughout the world is carried on in the Vatican by 12 congregations, 3 tribunals and 5 offices.

In its diplomatic relations with foreign countries, the Vatican is represented by the Papal Secretary of State. In 1953 the Vatican maintained diplomatic relations with 42 states through its papal-nuncios (ambassadors) and inter-nuncios (ministers). Apostolic Delegates, representatives without accredited rank, are maintained in a number of other countries.

The Vatican has its own railway station, postal facilities, coinage, newspaper, radio and television system. In addition to the Vatican itself, which includes St. Peter's Square, extraterritorial rights are enjoyed in 13 buildings in the city of Rome outside Vatican City.

## Venezuela (Republic)

(Estados Unidos de Venezuela)

Area: 352,143 square miles.

Population (est. Dec. 1953): 5,608,534\* (mestizo, 65%; white, 20%; Negro, 8%; Indian, 7%).

Density per square mile: 15.9\*

President: Col. Marcos Pérez Jiménez. Principal cities (census 1950)†: Caracas, 487,903 (capital); Maracaibo, 232,488 (oil); Barquisimeto, 105,080 (coffee, sugar, mining); Valencia, 83,674 (farming center).

Monetary unit: Bolívar.

Language: Spanish.

Religion: Roman Catholic.

\* Excludes tribal Indians. † Provisional.

**HISTORY.** Venezuela, a third larger than Texas, has a stormy political past and the distinction of being the world's second greatest producer of oil, outranked only by the U. S. Simón Bolívar, who led the liberation of much of the continent from Spain, was born in Caracas.

Columbus discovered Venezuela on his third voyage in 1498. A subsequent Spanish explorer, for reasons of his own, gave the country its name, meaning "Little Venice." There were no important settlements until Caracas was founded in 1567. With Bolívar taking part, Venezuela was one of the first South American colonies to revolt against Spain in 1810, but it was not until 1821 that independence was won. Federated at first with Colombia and Ecuador, the country set up a republic in 1830, and then sank for many decades into a condition of revolt, dictatorship and corruption. From 1908 to 1935, when he died, General Juan Vicente Gómez ruled tyrannically over the nation, picking various satellites to alternate with him in the presidential palace.

Dr. Rómulo Betancourt and his party, the liberal Acción Democrática, won 137 out of 160 seats in an election held Oct. 27, 1946, for a Constituent Assembly to draft a new constitution. The well-known writer, Rómulo Gallegos, easily won the presidential election of Dec. 14, 1947, as the candidate of Acción Democrática.

On Nov. 24, 1948, the Venezuelan army ousted Gallegos and established a military junta which was reconstituted on Nov. 27, 1950. Following elections for a constituent assembly on Nov. 30, 1952, the junta presented its resignation to the army, which named Col. Marcos Pérez Jiménez as provisional president on Dec. 2, 1952. His selection was confirmed by the constituent assembly.

**GOVERNMENT AND DEFENSE.** Venezuela is a union of 20 states, a federal district and two territories. Under the 1953 constitution (Venezuela's 21st) the Congress consists of a 42-member senate elected by state legislatures and a 104-member chamber of deputies elected directly. The president is elected by popular vote for five years.

Military service is compulsory, with a one- to three-year initial training period. The army has about 10,000 men. The navy has 1 destroyer, 4 frigates and several other smaller craft. There is a small air force.

**SOCIAL AND ECONOMIC CONDITIONS.** Illiteracy in 1949 was estimated at 60 per cent. Primary education between ages of 7 and 14 is compulsory. In Oct. 1952, 6,404 primary schools reported 536,212 pupils enrolled; secondary and special schools numbered 175 with 32,548 students in Jan. 1952. There are three universities—Los Andes at Mérida, Central University at Caracas, and Zulia at Maracaibo.

Agriculture engages the majority of the population, but production has failed to keep pace with the food needs of the rap-



idly increasing population. The principal crop is coffee, grown on 60,000 plantations on the slopes of the coastal mountains. Annual production averages 1,000,000 bags of 60 kilograms each. Exports of cacao in 1953 were 15,527 metric tons. Other important crops are sugar, tobacco, cotton, corn, wheat and tropical fruits. Stockraising, which is centered east of Lake Maracaibo, and on the llanos, is important. In 1950 there were 5,359,654 cattle and 1,292,808 hogs.

There are few industries, the most important being woodworking, cotton textiles and tobacco products. Electric power is plentiful, and a law of 1943 prepared the way for the beginning of an oil refining industry. In 1953, 150,696,000 bbl. of crude oil were refined and 2,725,041,000 cigarettes and 982,309 metric tons of cement were produced.

Oil, most of which is found on the northwest shore of Lake Maracaibo, is by far the dominant factor in the economy. It accounts for 95 per cent of exports, gives the country a big foreign trade balance and a treasury surplus. Recent foreign trade statistics, in millions of bolívares, are as follows:

	1951	1952	1953
Exports	4,533.7	4,858.4	4,735.6
Imports	2,150.3	2,420.7	2,475.9

In 1953 the U. S. supplied 67% of the imports, Britain, 8%. Leading imports were machinery and equipment, metals and manufactures, foodstuffs, beverages and textiles. In addition to petroleum (96%), the chief exports were iron ore, coffee and cacao. Most of the oil goes to the U. S. via the islands of Curaçao and Aruba, refining centers in the West Indies.

Highways include 3,829 miles for all-weather use, and 1,600 miles of unimproved road. Railway mileage is approximately 760. It consists largely of unconnected short lines.

The 1953-54 budget was balanced initially at 2,362,680,000 bolívares. There is no foreign debt.

**NATURAL FEATURES AND RESOURCES;** **CLIMATE.** An unusual setting of mountain systems breaks Venezuela into four distinct areas: (1) the Maracaibo lowlands; (2) the mountainous region in the north and northwest; (3) the Orinoco basin with the llanos (vast grass-covered plains) on its northern border and great forest areas in the south and southeast; (4) the Guiana highland, south of the Orinoco, accounting for nearly half the national territory. About 80 per cent of Venezuela is drained by the Orinoco and its 400 tributaries.

Oil production increased from 116,000,000 barrels in 1931 to 644,210,620 barrels in 1953 (1952: 660,215,000 barrels). In

addition to oil, Venezuela has gold mines in the region southwest of the Orinoco delta. Output in 1953 was 27,295 troy oz. Of minor importance are bauxite, coal, copper, tin, asbestos and asphalt. Diamond production in 1953 was 84,790 carats. A subsidiary of Bethlehem Steel Corp. began the mining of iron ore in the El Pao area south of the Orinoco river in 1950, while a U. S. Steel Corp. subsidiary is exploiting a rich "iron mountain" south of Ciudad Bolívar on the Orinoco. Production of iron ore in 1953 totaled 2,296,401 metric tons.

The climate is tropical and unhealthful except where modified by altitude; it approaches the mild temperate in the higher western mountains. Most rainfall occurs between April and October, and the rest of the year is dry. At La Guaira, the mean annual temperature is 81°, at Caracas, 70°, at Cumaná, 83°.

## Yemen (Kingdom)

Area: c. 31,000 square miles.

Population (est. 1953): 4,500,000.

Density per square mile: c. 145.2.

King: Sayf al-Islam Ahmad ibn Yahya.

Principal cities (est.): Hodeida, 30,000 (chief port); Sana, 25,000 (capital); Taiz, 12,000 (seat of government).

Monetary unit: Maria Theresa dollar (riyal).

Language: Arabic.

Religion: Moslem.

The history of Yemen, in the southwest Arabian peninsula fronting the Red Sea, dates back to the Minaean kingdom (1,200-650 B.C.). It accepted Islam in 628 A.D. and in the 10th century came under the control of the Rassite dynasty of the Zaidi sect, which still rules. The Turks occupied the area from 1538 to 1630 and from 1849 to 1918. Its sovereign status was confirmed by treaties signed with Saudi Arabia and Britain in 1934. Yemen was admitted to the U. N. in 1947.

Yemen is an absolute monarchy. The present ruler came to the throne in 1948, after insurgents murdered his father. Nearly all the population of the country is settled and nomadism prevails only in the lowlands.

Unlike most of Arabia, the Yemeni highlands are well adapted to agriculture; they produce grain, fruit, vegetables and Mocha coffee. Stock raising flourishes, particularly in the lowlands. Exports include coffee and hides.

The narrow coastal plain rises sharply to a maritime range and central plateau (highest point, 12,336 ft.). Winter temperatures in the highlands fall below 40° F. and summers are cool.

## Yugoslavia (Republic) (Federations Narodna Republika Jugoslavija)

Area: 99,181 square miles.

Population (census 1953)\*: 16,927,275 (1931: Serbian, 46%; Croat, 28.5%; Slovene, 8.5%; German, 3.6%; others [Magyar, Albanian, Rumanian, Czech], 13.4%).

Density per square mile: 170.7.

President: Josip Broz (Tito).

Principal cities (census 1953)\*: Belgrade (Beograd), 469,988 (capital); Zagreb, 350,452 (Croat commercial center); Ljubljana, 138,211 (Slovenian industrial center); Sarajevo, 135,657 (Bosnian manufacturing center); Skopje, 121,551 (capital, Macedonia); Subotica, 115,402 (wheat).

Monetary unit: Dinar.

Languages: Serbo-Croat, Slovene, Macedonian (all official).

Religions (est. 1952): Greek Orthodox, 49.6%; Roman Catholic, 36.8%; Moslem, 12.5%; others, 1.1%.

\* Provisional returns.

**HISTORY.** Yugoslavia, twice the size of Pennsylvania and fronting on the Adriatic Sea opposite Italy, was formed in 1919 out of some of Europe's oldest trouble spots in the Balkans. After a brief and unstable history of 25 years, it emerged from World War II as a Russian satellite. World amazement, however, followed an attack made June 28, 1948, by the Soviet-dominated Cominform on Marshal Tito and the Yugoslav Communist party for inspiring a "hateful" policy against the Soviet Union and retreating from the Communist line in foreign and domestic policies. Unlike other officials similarly attacked by Soviet organs in the past, Tito denounced the Cominform's action and still continued in full power despite further repeated attacks on him by the Cominform and members of the Soviet east European bloc. On September 29, 1949, the Soviet Union denounced its 1945 treaty of friendship with Yugoslavia.

The 1919 components of Yugoslavia were the old kingdoms of Serbia and Montenegro, and the following: Bosnia-Herzegovina, formerly administered jointly by Austria and Hungary; Croatia-Slavonia, which had had limited autonomy under Hungary; and Slovenia and Dalmatia, formerly administered by Austria.

Alexander I, son of King Peter of Serbia, became the first king of the new country on Aug. 16, 1921. His reign was a rocky one because the Croats, under Dr. Stephen Radic, unceasingly sought autonomy. Finally, a Croat assassinated Alexander in Marseille in October 1934, and since his son Peter was a minor, a regency was set up under Prince Paul, the new king's uncle.

After pursuing an increasingly pro-Axis policy under the regent, Yugoslavia signed

the Axis Pact on March 25, 1941; this caused the overthrow of the government two days later. On April 6 the country was invaded by the Nazis and was speedily occupied. While the king and government fled to the Near East and later to London, Yugoslavia was divided into German, Italian, Hungarian and Bulgarian occupation zones. Puppet regimes were established in Croatia and Serbia.

Inside Yugoslavia, the Axis occupation was fought by two guerrilla armies—the Chetniks under Draja Mikhailović, who supported the monarchy; and the Partisans under Marshal Tito (Josip Broz), who leaned toward Russia. These two groups fought not only the Germans, but also each other. In November 1943, Tito established an Executive National Committee of Liberation to act as a provisional government, thus repudiating King Peter, who was in exile.

In the elections of Nov. 11, 1945, Tito's forces won overwhelmingly, partly because the monarchist factions boycotted the balloting. Convening on Nov. 29, the new Assembly abolished the monarchy and set up the Federal People's Republic of Yugoslavia. Tito was prime minister, and his government won recognition from Britain and the United States.

The Tito government embarked upon an internal policy of ruthless oppression and elimination of opposition factions, including the summary trial and execution of Mikhailović in 1946. In April, 1947, it initiated a five-year plan aimed at improvement of agriculture and heavy expansion of industry.

Externally the government pursued, until 1948, its uncompromising support of Moscow, as manifested by Yugoslav aid to anti-government Greek guerrillas, which had led to a U. N. inquiry in 1947. Soviet support enabled the nation to secure most of Italian Istria under the 1947 peace treaty, but efforts to secure sovereignty over the key port of Trieste were unsuccessful.

Tito was elected president under the new constitution on Jan. 14, 1953.

**GOVERNMENT AND DEFENSE.** Under the 1953 constitution Yugoslavia is a federal republic composed of six units—Serbia (which includes the autonomous province of Vojvodina and the autonomous region of Kosovo-Metohija), Croatia, Slovenia, Bosnia-Herzegovina, Macedonia and Montenegro. Executive power is vested in the federal executive council of 30 to 45 members elected by and from the federal assembly, and presided over by the president of the republic, who is elected by and is responsible to the federal assembly. The assembly consists of (1) a federal council of 352 members, most of whom are popu-



larly elected and (2) a council of producers, elected by organized producing citizens in agriculture, industry and the crafts. Actual administration is carried on by 5 state secretaries responsible to the executive council. Actual control of the country remains with the Yugoslav Communist party, which had 779,382 members on June 30, 1952.

The army, based upon the National Liberation Army and partisan detachments which at one time had a strength of about 800,000, was unofficially estimated to number from 500,000 to 600,000 in 1951, including police forces. Equipment generally is poor. The air force had about 600 planes in 1950. The navy was believed to include 3 submarines and 4 escort vessels on Jan. 1, 1953. It received several small ships from the Italian fleet in 1948.

**SOCIAL AND ECONOMIC CONDITIONS.** Education on the elementary level is compulsory and free. Illiteracy was 24.8% in 1948. In 1951-52, there were 13,647 elementary schools with 1,454,177 pupils, 1,846 secondary schools with 489,949 pupils and 1,225 technical schools with 172,911 students. The various universities and technical colleges had a total enrollment of 55,046 students.

Agriculture occupies about 80 per cent of the population. The principal crops are corn, wheat, sugar beets, hemp, hops, opium (in Macedonia) and tobacco (chiefly in Macedonia and Herzegovina). Crop figures in 1952 were as follows, in metric tons: wheat, 2,274,400; maize, 1,470,100; sugar beets, 1,160,000; tobacco, 14,800; potatoes, 1,136,000; flax, 10,000. Excellent wines are produced in Dalmatia and Herzegovina and along the Danube (production 1952: 80,000,000 U. S. gallons).

In 1952 there were 4,804,000 cattle, 10,518,000 sheep and 3,990,000 hogs. Wool production in 1952 was about 17,000 metric tons.

Manufactures are limited for the most part to consumers' goods. Legislation passed Dec. 5, 1946, nationalized all private economic enterprises, public works and industries in 42 branches of the national economy including mining, metallurgy, and all industries which process natural products.

Yugoslavia has only limited access to ports on the Adriatic because of the difficulty in crossing the coastal range with

railways and highways. Waterways, especially the Danube, are important. The merchant marine in 1952 totaled 126 vessels (of over 100 tons) with a gross tonnage of 246,392. Railway mileage in 1949 was 7,223; highway mileage in 1950 was 30,184.

Recent trade data are as follows (in billions of dinars):

	1951	1952*	1953*
Exports	9.18	73.96	55.79
Imports†	19.54	111.92	118.59

\* The dinar was devalued Jan. 1, 1952. † Including imports in aid.

Chief exports in 1952 were maize (22%), sawn timber (9%) and refined lead (8%). Leading customers were western Germany (24%), the U. S. (15%) and Britain (14%); leading suppliers, western Germany (20%), the U. S. (19%) and Italy (8%). Chief imports were wheat and flour (17%), cotton (6%) and coke (4%). Imports in aid totaled 30,492,373,000 dinars for the year 1952.

The 1952 budget (computed at free market prices as opposed to fixed prices used in prior years) balanced revenue and expenditure at 341,559,600,000 dinars.

**NATURAL FEATURES AND RESOURCES; CLIMATE.** About half of Yugoslavia is mountainous. In the north, the Dinaric Alps rise abruptly from the sea and progress eastward as a barren limestone plateau called the Karst. Montenegro is a jumbled mass of mountains, containing also some grassy slopes and fertile river valleys. Southern Serbia, too, is mountainous. A rich plain in the north and northeast, drained by the Danube, is the most fertile area of the country. The Danube and tributaries—the Drava, Sava and Morava—in the northeast are the principal rivers.

Yugoslavia is the Balkans' principal mineral producer. Production in 1952 was as follows, in metric tons: coal, 7,853,000; lignite, 4,245,000; blister copper, 32,019; iron ore, 676,000; chrome (concentrates), 25,827; bauxite, 577,200; manganese ore, 12,687; refined lead, 67,180; raw zinc, 14,463; silver, 257,000 oz. Uranium deposits have been reported.

On the Adriatic, Yugoslavia's climate is mild and Mediterranean, but in the interior the winters are cold and the summers hot. January temperatures in Belgrade average about 30°, and summer temperatures are usually in the 70's. Rainfall is heaviest throughout the country from October to January.



## Explorations and Discoveries

## Africa

Country or place	Event	Explorer or discoverer	Date
Sierra Leone	Visited	Hanno, Carthaginian seaman	c. 520 B.C.
Congo River	Mouth discovered	Cão, Portuguese navigator	C. A.D. 1484
Cape of Good Hope	Doubled	Bartholomeu Diaz, Portuguese navigator	1488
Gambia River	Explored	Mungo Park, Scottish explorer	1795
Sahara Desert	Crossed	Denham and Clapperton, English explorers	1822-23
Zambezi River	Discovered	Livingstone, Scottish explorer	1851
Sudan	Explored	Barth, German explorer	1852-55
Victoria Falls	Discovered	Livingstone	1855
Lake Tanganyika	Discovered	Burton and Speke, British explorers	1858
Congo River	Traced	Stanley, British explorer	1877

## Asia

Punjab (India)	Visited	Alexander the Great	327 B.C.
China	Visited	Marco Polo, Italian traveler	c. A.D. 1272
Tibet	Visited	Odoric, Italian monk	c. 1325
Southern China	Explored	Conti, Italian adventurer	c. 1440
India	Visited by Cape route	Vasco da Gama, Portuguese navigator	1498
Japan	Visited	St. Francis Xavier of Spain	1549
Arabia	Explored	Niebuhr, German explorer	1762
China	Explored	Richthofen, German scientist	1868
Mongolia	Explored	Przhevalsky, Russian explorer	1870-73
Central Asia	Explored	Hedin, Swedish scientist	1890-1908

## Europe

Shetland Islands	Visited	Pytheas of Massilia (Marseille)	c. 325 B.C.
North Cape	Rounded	Ottar, Norwegian explorer	c. A.D. 870
Iceland	Colonized	Norwegian noblemen	c. 890-900

## North America

Greenland	Colonized	Eric the Red, Norwegian navigator	c. A.D. 985
Labrador; Nova Scotia (?)	Discovered	Leif Ericsson, Norwegian explorer	1000
West Indies	Discovered	Christopher Columbus, Italian navigator	1492
North America	Coast discovered	John Cabot, for British	1497
Pacific Ocean	Discovered	Balboa, Spanish explorer	1513
Florida	Explored	Ponce de León, Spanish explorer	1513
Mexico	Conquered	Cortez, Spanish adventurer	1519
St. Lawrence River	Discovered	Cartier, French navigator	1534
Southwest U. S.	Explored	Coronado, Spanish explorer	1540-42
Colorado River	Discovered	Alarcón, Spanish explorer	1540
Mississippi River	Discovered	Hernando de Soto, Spanish explorer	1541
Frobisher Bay	Discovered	Frobisher, English seaman	1576
Maine Coast	Explored	Champlain, French explorer	1604
Jamestown, Va.	Settled	Smith, English colonist	1607
Hudson River	Explored	Hudson, English navigator	1609
Hudson Bay (Canada)	Discovered	Hudson	1610
Baffin Bay	Discovered	Baffin, English navigator	1616
Lake Michigan	Navigated	Nicolet, French explorer	1634
Arkansas River	Discovered	Marquette and Joliet, French explorers	1673
Mississippi River	Explored	LaSalle, French explorer	1682
Bering Strait	Discovered	Bering, Danish explorer	1728
Alaskan Coast	Sighted	Gvosdeff, Russian sailor	1731
Mackenzie River (Canada)	Discovered	Mackenzie, Scottish-Canadian explorer	1789
Northwest U. S.	Explored	Lewis and Clark	1804-06
Northeast Passage (Arctic Ocean)	Navigated	Nordenskiöld, Swedish explorer	1879
Greenland	Explored	Peary, American explorer	1892
Northwest Passage	Navigated	Amundsen, Norwegian explorer	1906

## South America

Country or place	Event	Explorer or discoverer	Date
Continent	Visited	Columbus, Italian navigator	1498
Brazil	Discovered	Cabral, Portuguese explorer	1500
Peru	Conquered	Pizarro, Spanish explorer	1532-33
Amazon River	Explored	Orellana, Spanish explorer	1541
Cape Horn	Discovered	Schouten, Dutch navigator	1615

## Oceania

New Guinea	Visited	Menezes, Portuguese explorer	1526
Australia	Visited	Jansz, Dutch explorer	1606
Tasmania	Visited	Tasman, Dutch navigator	1642
Australia	Explored	Sturt, English explorer	1828
Australia	Explored	Burke and Wills, Australian explorers	1861

## Arctic, Antarctic and Miscellaneous

Ocean exploration	Expedition	Magellan's ships circumnavigated the globe	1519-22
Spitsbergen	Visited	Barents, Dutch navigator	1596
(Arctic Europe)			
Antarctic Circle	Crossed	Cook, English navigator	1773
Antarctica	Discovered	Palmer, U. S. explorer (archipelago) and Bellingshausen, Russian navigator (mainland)	1820-21
Antarctica	Explored	Wilkes, American explorer	1840
North Pole	Discovered	Peary, American explorer	1909
South Pole	Discovered	Amundsen, Norwegian explorer	1911

## The Seven Wonders of the World

## THE PYRAMIDS OF EGYPT

A group of three pyramids, *Khufu*, *Khafra* and *Menkaura* at Giza, outside modern Cairo, is often called the first wonder of the world; it is also the oldest and only surviving "wonder." The largest pyramid, built by Khufu (Cheops), had an original estimated height of 482 ft. (now approximately 450 ft.). The exact date of its construction is unknown and has been estimated as early as 4700 B.C. but is probably closer to 2900 B.C.

## HANGING GARDENS OF BABYLON

Often listed as the second wonder, these gardens were supposedly built by Nebuchadnezzar about 600 B.C. to please his queen, Amuhia. They are also associated with the mythical Assyrian Queen, Semiramis. Archeologists surmise that the gardens were laid out atop a vaulted building, with provisions for raising water. The terraces were said to rise from 75 to 300 ft.

The Walls of Babylon, also built by Nebuchadnezzar, are sometimes referred to as the second (or the seventh) wonder instead of the Hanging Gardens.

## STATUE OF ZEUS (JUPITER)

## AT OLYMPIA

The work of Phidias (5th century B.C.), this colossal figure in gold and ivory was reputedly 40 ft. high. All trace of it is lost, except for reproductions on coins.

## TEMPLE OF ARTEMIS (DIANA)

## AT EPHEBUS

A beautiful structure, begun about 350 B.C. in honor of a non-Hellenic goddess who later became identified with the Greek goddess of the same name. The temple, with Ionic columns 60 feet high, was destroyed by invading Goths A.D. 262.

## MAUSOLEUM AT HALICARNASSUS

This famous monument was erected by Queen Artemisia in memory of her husband, King Mausolus of Caria in Asia Minor, who died in 353 B.C. Some remains of the structure are in the British Museum. This shrine is the source of the modern word "mausoleum."

## COLOSSUS AT RHODES

This bronze statue of Helios (Apollo), about 105 ft. high, was the work of the sculptor Chares, who reputedly labored for 12 years before completing it in 280 B.C. It was destroyed during an earthquake in 224 B.C.

## PHAROS OF ALEXANDRIA

The seventh wonder was the Pharos (lighthouse) of Alexandria, built by Sosthenes of Knidos during the 3rd century B.C. on the island of Pharos off the coast of Egypt. It was destroyed by an earthquake in the 13th century.

## Population, Land Areas of the World and World Elevations

Area	Estimated population, in thousands	Approximate area, in thousands of sq. mi.	Per cent of total land area	Population density per sq. mi.	Highest	Elevation, feet	Lowest	Dimensions, miles East-West North-South
<b>WORLD</b>	2,506,934	58,165	100.0	43.1	Mt. Everest, 29,141	Dead Sea, 1,290 below sea level	24,902	24,860
<b>ASIA, excluding Asiatic U.S.S.R.; including Philippines and Indonesia</b>	1,341,877	10,573	18.2	126.9	Mt. Everest, Nepal, 29,141	Dead Sea, 1,290 below sea level	5,400*	5,300*
<b>AFRICA</b>	206,603	11,567	19.9	17.9	Mt. Kilimanjaro, Tanganyika, 19,566	Qattara Depression, Egypt, 440 below sea level	4,600	5,000
<b>NORTH AMERICA</b>	229,660	9,360	16.1	24.5	Mt. McKinley, Alaska, 20,300	Death Valley, Calif., 275 below sea level	3,200	4,000
<b>SOUTH AMERICA</b>	114,791	6,857	11.8	16.7	Mt. Aconcagua, Argentina, 22,835	Sea level	3,200	4,600
<b>ANTARCTICA</b>	Uninhabited	6,000	10.3		Mt. Thorvald Nilson, 15,400	Sea level		
<b>EUROPE, including Iceland; excluding European U.S.S.R.</b>	399,080	1,904	3.3	209.6	Mt. Blanc, France, 15,781	Sea level	3,300†	2,400†
<b>AUSTRALIA</b>	8,753	2,975	5.1	2.9	Mt. Kosciuszko, 7,328	Lake Eyre, 38 below sea level	2,400	1,900
<b>OCEANIA, incl. New Zealand and British, U. S., French and Australian territories, possessions, etc.</b>	4,870	330	.5	14.7	Mauna Kea, Hawaii, 13,784	Sea level		
<b>U.S.S.R.</b>	201,300	8,599	14.3	23.4	Mt. Pobedy, 24,409	Caspian Sea, 86 below sea level	5,000	2,500

\* Including Asiatic U.S.S.R. † Including European U.S.S.R.

## HIGH POPULATION DENSITIES (per square mile)

Monaco	33,898.3	Belgium	743.3	Tangier	478.4	Korea	352.0	
Trieste	1,307.2	Japan	588.3	Germany (East)	444.6	San Marino	341.3	
Netherlands	843.1	United Kingdom	541.8	Italy	404.7	Ceylon	319.9	
Maldives Islands	808.7	Germany (Fed. Rep.)	517.7	Lebanon	393.6	Haiti	308.4	



## Representative Mountain Peaks of the World

Mountain peak	Range	Location	Height, feet
Everest	Himalayas	Tibet-Nepal	29,141
Godwin Austen (K2)	Karakoram	India	28,250
Kanchenjunga	Himalayas	Nepal	28,140
Makalu	Himalayas	Tibet-Nepal	27,790
Dhaulagari	Himalayas	Nepal	26,795
Gurla Mandhata	Himalayas	Tibet	25,355
Tirich Mir	Hindu Kush	Pakistan	25,230
Muztagh Ata (K5)	Pamirs	Sinkiang	24,388
Muztagh	Kunlun	Sinkiang	23,890
Aconcagua	Andes	Argentina	22,835
Dos Conos	Andes	Argentina	22,507
Ojos del Salado	Andes	Argentina-Chile	22,408
Huascarán	Andes	Peru	22,205
Llullaillaco	Andes	Argentina-Chile	22,148
Kailas	Himalayas	Tibet	22,028
Mercedario	Andes	Argentina	21,883
Tupungato	Andes	Argentina-Chile	21,489
Sajama	Andes	Bolivia	21,391
Chimborazo	Andes	Ecuador	20,557
McKinley	Alaska	Alaska	20,300
Logan	St. Elias	Canada (Yukon Territory)	19,850
Kilimanjaro	.....	Tanganyika	19,565
Cotopaxi	Andes	Ecuador	19,344
Cayambe	Andes	Ecuador	19,170
Misti	Andes	Peru	19,167
Orizaba (Citlaltepētli)	Sierra Madre Oriental	Mexico	18,696
Elbrus	Caucasus	U.S.S.R.	18,468
St. Elias	St. Elias	Alaska-Canada	18,008
Vilcanota	Andes	Peru	17,998
Popocatepetl	Cordillera de Anáhuac	Mexico	17,883
Cerro de Cuz	Andes	Bolivia	17,828
Ixtaccihuatl	Cordillera de Anáhuac	Mexico	17,338
Tolima	Andes	Colombia	17,109
Dikh-Tau	Caucasus	U.S.S.R.	17,054
Kenya	.....	Kenya	17,040
Ruwenzori	Ruwenzori	Belgian Congo-Uganda	16,795
Kazbek	Caucasus	U.S.S.R.	16,545
Bona	Wrangell	Alaska	16,420
Klyuchevskaya	Kamchatka	U.S.S.R.	15,912
Savalan	Elburz	Iran	15,784
Blanc	Alps	France	15,781
Lister	.....	Antarctica	15,384
Fairweather	St. Elias	Alaska	15,287
Dashan	Simen	Ethiopia	15,158
Markham	.....	Antarctica	15,102
Matterhorn	Alps	Switzerland-Italy	14,780
Whitney	Sierra Nevada	California	14,495
Elbert	Rockies	Colorado	14,431
Massive	Rockies	Colorado	14,418
Rainier	Cascades	Washington	14,408
Longs	Rockies	Colorado	14,255
Colima	Sierra Madre Occidental	Mexico	14,239
Shasta	Sierra Nevada	California	14,161
Pikes Peak	Rockies	Colorado	14,110
Finsteraarhorn	Alps	Switzerland	14,026
Gannett Peak	Rockies	Wyoming	13,785
Mauna Loa	.....	Hawaii	13,680
Jungfrau	Alps	Switzerland	13,667
Cameroon	.....	British Cameroons	13,353
Erebus	.....	Antarctica	13,202
Robson	Rockies	British Columbia	12,972
Fujiyama (Fujisan)	.....	Japan	12,385
Cook	Southern Alps	South Island, New Zealand	12,349
Hood	Cascades	Oregon	11,245

## Large Islands of the World

Island and status	Location	Area, sq. mi.
GREENLAND (Danish territory)	North Atlantic	839,782
NEW GUINEA (Under Dutch crown, west part; U. N. trust territory under Australian administration, northeast part; Australian territory, southeast part)	Southwest Pacific	312,329
BORNEO (United States of Indonesia, south part; British protectorate and colonies, north part)	South China Sea	290,012
MADAGASCAR (French overseas territory)	Off southeast coast of Africa	228,589
BAFFIN (Canada, Northwest Territories)	Arctic	201,600
SUMATRA (United States of Indonesia)	Northeast Indian Ocean	163,145
HONSHU (Japanese home island)	Sea of Japan—Pacific	91,278
GREAT BRITAIN (Eng., Scotland, Wales)	Off coast of northwest Europe	88,133
VICTORIA (Canada, Northwest Territories)	Arctic	80,450
ELLESMEIRE (Canada, Northwest Territories)	Arctic Ocean	75,024
CELEBES (United States of Indonesia)	Southwest Pacific	69,255
SOUTH ISLAND, NEW ZEALAND	South Pacific	58,093
JAVA (United States of Indonesia)	Northeast Indian Ocean	48,504
NORTH ISLAND, NEW ZEALAND	South Pacific	44,281
NEWFOUNDLAND (Canadian province)	North Atlantic	42,734
CUBA (Republic)	Caribbean Sea	42,350
LUZON	Philippine Islands	40,814
ICELAND (Republic)	North Atlantic	39,688
MINDANAO	Philippine Islands	36,906
HOKKAIDO (Japanese home island)	Sea of Japan—Pacific	34,084
IRELAND (Ireland, republic, south part; Northern Ireland, part of United Kingdom)	West of Great Britain	31,840
HISPANIOLA (Dominican Republic, east part; Haitian republic, west part)	Caribbean Sea	30,075
TASMANIA (Australian state)	South of Australia	26,215
BANKS (Canada, Northwest Territories)	Arctic	25,992
CEYLON (Member of Commonwealth of Nations)	Indian Ocean	25,332
SAKHALIN (U.S.S.R.)	North of Japan	24,560
DEVON (Canada, Northwest Territories)	Arctic	20,484
TIERRA DEL FUEGO (East part to Argentina; west part to Chile)	Southern tip of South America	18,530
MELVILLE (Canada, Northwest Territories)	Arctic	16,164
SOUTHAMPTON (Canada, N. W. Territories)	Hudson Bay	16,114

## Oceans and Seas

Name	Area, sq. mi.	Average depth, feet	Greatest known depth, ft.	Place of greatest known depth
Pacific Ocean	63,801,700	14,048	34,440	Off Mindanao
Atlantic Ocean	31,830,800	12,880	30,246	Off Puerto Rico
Indian Ocean	28,356,300	13,002	22,968	Off Sumatra-Java
Arctic Ocean	5,440,200	3,953	17,850	77° 45' N.; 175° W.
Mediterranean Sea*	1,145,100	4,688	15,564	Off Cape Matapan, Greece
Caribbean Sea	1,049,500	8,685	22,788	Off Cayman Islands
South China Sea	895,400	5,419	18,090	West of Luzon
Bering Sea	875,800	4,714	13,422	Off Buldir Island
Gulf of Mexico	618,200	4,874	12,744	Sigsbee Deep
Okhotsk Sea	589,800	2,749	11,400	146° 10' E.; 46° 50' N.
East China Sea	482,300	617	9,126	25° 16' N.; 125° E.
Hudson Bay	475,800	420	600	Near entrance
Sea of Japan	389,100	4,429	12,276	Central Basin
Andaman Sea	308,000	2,854	12,392	Off Car Nicobar Island
North Sea	222,100	308	2,165	Skagerrak
Red Sea	169,100	1,611	7,254	Off Port Sudan
Baltic Sea	163,000	180	1,380	Off Gotland

\* Including Black Sea and Sea of Azov. NOTE: For Caspian Sea, see Large Lakes of World elsewhere in this section.

## Famous Waterfalls of the World

Waterfall	Location	River	Height, feet
Angel	Venezuela	Tributary of Caroni	3,300
Cuquenán, or Kukenam	Venezuela-British Guiana	Cuquenán	2,000
Sutherland	South Island, N. Z.	Arthur	1,904
Tugela	Natal, South Africa	Tugela	1,800
Ribbon (Yosemite)	California	Creek, flowing into Yosemite	1,612
Upper Yosemite	California	Yosemite Creek, tributary of Merced	1,430
Gavarnie	Southwestern France	Gave de Pau	1,385
Takkakaw	British Columbia	Tributary of Yoho	1,200
Widow's Tears (Yosemite)	California	Tributary of Merced	1,170
Staubbach	Switzerland	Staubbach (Lauterbrunnen valley)	980
Trummelbach	Switzerland	Trummelbach (Lauterbrunnen)	950
Middle Cascade (Yosemite)	California	Yosemite Creek, tributary of Merced	910
Multnomah	Oregon	Multnomah Creek, tributary of Columbia	850
Vettisfos	Norway	Morkedöla	850
King Edward VII	British Guiana	Courantyne	840
Gersoppa	India	Sharavati	830
Kaeteur	British Guiana	Pataro	741
Kalambo	Tanganyika	.....	705
Fairy (Mt. Rainier Park)	N. Rhodesia	Stevens Creek	700
Maradalsfos	Washington	Stream flowing into Ejkdalsvand (lake)	650
Skykkjefos	Norway	In Skykkjedal (valley) of Inner Hardanger Flord	650
Terni	Italy	Velino, tributary of Nera	650
Maletsunyane (Le Bihan)	Basutoland, Africa	Maletsunyane	630
Bridal Veil (Yosemite)	California	Bridal Veil Creek, tributary of Merced	620
Nevada (Yosemite)	California	Merced	594
Voringfos	Norway	Bjorela	535
Skjaeggalsfos	Norway	Tyssaa	525
Marina	British Guiana	Tributary of Kuribrong, a tributary of the Pataro	500
Tequendama	Colombia	Bogotá	450
King George's	Cape Province, South Africa	Orange	450
Herval Cascades	Brazil	.....	400
Guayra	Paraguay-Brazil	Paraná	374
Illilouette (Yosemite)	California	Illilouette Creek, tributary of Merced	370
Granite (Mt. Rainier Park)	Washington	Granite Creek	350
Splendor of Sun	Nikko, Japan	.....	350
Victoria	Southern Rhodesia	Zambezi	343
Comet (Mt. Rainier Park)	Washington	Van Trump Creek	320
Lower Yosemite	California	Yosemite Creek	320
Vernal (Yosemite)	California	Merced	317
Virginia	Northwest Territories, Canada	South Nahanni, tributary of Mackenzie	315
Lower Yellowstone	Wyoming	Yellowstone	308
Grand	Labrador, Canada	Hamilton	302
Sluiskin (Mt. Rainier Park)	Washington	Paradise	300
Snoqualmie	Washington	Snoqualmie	270
Seven Falls	Colorado	.....	266
Tallulah	Georgia	Tallulah	251
Shoshone	Idaho	Snake	195
Narada (Mt. Rainier Park)	Washington	Paradise	168
Niagara	New York-Ontario	Niagara	167
Tower (Yellowstone)	Wyoming	Tower Creek, tributary of Yellowstone	132



## PRINCIPAL DESERTS OF THE WORLD

Desert	Location	Approximate size	Appx. elevation, ft.
Atacama.....	North Chile.....	400 mi. long.....	7,000-13,500
Black Rock.....	Northwest Nevada.....	70 mi. long and in places 20 mi. wide, or about 1,000 sq. mi.	2,000-5,000
Colorado.....	Southeast California from San Geronio Pass to Gulf of California	200 mi. long and a maximum width of 50 mi.....	Few feet above to about 250 below sea level
Dasht-i-Kavir.....	Southeast of Caspian Sea in Iran.....	.....	2,000
Dasht-i-Lut.....	Northeast of Kerman in Iran.....	.....	1,000
Gobi (Shamo or "Desert of Sand")	Covers most of Mongolia.....	800 by 400 mi., or at least 300,000 sq. mi.	3,000-5,000
Great Arabian.....	Most of Arabia.....	1,500 mi. long.....	.....
Syrian (El Hamad)	North of 30° N. Latitude.....	.....	1,850
Nefud (Red Desert)	South of Jauf.....	400 mi. long and average of 200 mi. wide.....	3,000
Dahna.....	Southeast of Nefud.....	400 by 30 mi.....	.....
Rub' al Khali.....	South portion of Nejd.....	.....	.....
Great Australian.....	Western portion of Australia. (Includes: Great Sandy; Gibson; Great Victoria; Arunta.)	About one-half the continent	600-1,000
Great Salt Lake.....	West of Great Salt Lake to Nevada-Utah line.	80 by 50 mi.....	4,500
Kalahari.....	South Africa between the Orange and Zambezi Rivers	400 by 600 mi., or about 120,000 sq. mi.....	Over 3,000
Kara Kum (Desert of Khiva or "Black Sands")	Southwest Turkestan south of Lake Aral	110,000 sq. mi.....	.....
Kizil Kum.....	Central Turkestan southeast of Lake Aral	370 by 220 mi., or about 70,000 sq. mi.....	160 near Lake Aral to 2,000 in southeast
Mohave.....	North of Colorado Desert and south of Death Valley in southeast California	15,000 sq. mi.....	2,000
Painted Desert.....	Northeast Arizona.....	75 mi. wide.....	High plateau 5,000
Sahara.....	Northern states of Africa to about 15° N. Lat. and from Red Sea to the Atlantic Ocean	3,200 mi. greatest length along 20° N. Lat.; width varies from 800 to 1,400 mi. Area over 3,500,000 sq. mi.	440 below sea level to 11,000 above with an average elevation of 1,400-1,600
Libyan.....	East portion of the Sahara west of Nile	More than 500,000 sq. mi.....	.....
Nubian.....	From Red Sea to great west bend of the Nile	.....	2,500
Takla Makan.....	S. Central Sinkiang in Tarim Basin	700 mi. long.....	.....
Thar (Indian).....	Chiefly Rajputana, India.....	About 300 mi. by 380 mi.....	About 500

## Gestation, Incubation and Longevity of Certain Animals

Source: T. Donald Carter, American Museum of Natural History.

Animal	Gestation and incubation, in days (average)	Longevity, in years (record exceptions)	Animal	Gestation and incubation, in days (average)	Longevity, in years (record exceptions)
Ass.....	365-385	18-20 (46)	Horse.....	304-360 (335)	20-25 (50+)
Bear.....	180-240*	15-20 (34)	Kangaroo.....	c. 39	10-12 (16)
Beaver.....	94-128	10-15 (20)	Lion.....	105-111	10 (29)
Cat.....	52-63	10-12 (21)	Mare.....	307-419 (336)	20 (45+)
Chicken.....	21	7-8 (14)	Monkey.....	149-179* (164)	12-15* (29)
Cow.....	c. 280	9-12 (25)	Mouse.....	19-31*	1-3 (4)
Deer.....	140-246*	10-15 (26)	Parakeet (Budgerigar)	17-20 (18)	8 (12+)
Dog.....	55-70 (63)	10-12 (24)	Pigeon.....	18	10-12 (39)
Duck.....	21-35* (28)	10 (15)	Rabbit.....	27-36 (31)	6-8 (15)
Elephant.....	540-660* (628)	30-40 (98)	Rat.....	21-30 (22)	3 (5)
Ewe.....	146-161 (151)	12 (16)	Sow.....	101-130 (115)	10 (22)
Goat.....	135-163 (150)	12 (17)	Squirrel.....	28-35	8-9 (15)
Groundhog.....	35-42	4-7	Vixen (fox).....	51-60	8-10 (14)
Guinea pig.....	63-71	3 (6)	Whale.....	276-365*	.....
Hamster, common	20-22	2	Wolf.....	63	10-12 (16)
Hippopotamus.....	220-240	30 (49+)	Woman.....	270+ or -	72†

\* Depending on kind. † Latest life expectancy charts list this age.

## Principal Rivers of the World

River	Source	Outflow	Approx. length, miles
Nile	Lake Victoria	Mediterranean Sea	4,000
Missouri-Mississippi	Source of Red Rock Creek, Montana	Gulf of Mexico	3,988
Amazon	Glacier-fed lakes, Peru	Atlantic Ocean	3,900
Ob	Altai Mts., U.S.S.R.	Gulf of Ob	3,200
Yangtze Kiang	Tibetan plateau	China Sea	3,100
Amur	Confluence of Shilka (U.S.S.R.) and Argun (Manchuria) Rivers	Tartary Strait	2,900
Congo	Between Lakes Nyasa and Tanganyika	Atlantic Ocean	2,900
Lena	Baikal Mts., U.S.S.R.	Arctic Ocean	2,800
Yenisei	Tannu Ola Mountains, western Mongolia	Arctic Ocean	2,800
Hwang Ho (Yellow)	East part of Kunlun Mts., west China	Gulf of Chihli	2,700
Niger	Border of Sierra Leone	Gulf of Guinea	2,600
Mackenzie	Head of Finlay River, British Columbia	Beaufort Sea (Arctic Ocean)	2,514
Mékong	Tibetan highlands	South China Sea	2,500
Missouri	Actual headwaters Red Rock Creek; beginning of Missouri at conflu- ence of Gallatin, Mad- ison, Jefferson Rivers	Mississippi River	2,475 (confluence) 2,723 (headwaters)
Mississippi	Lake Itasca, Minnesota	Gulf of Mexico	2,470
Paraná	Confluence of Paranaíba and Grande Rivers, southeast Brazil	Rio de la Plata (Atlantic Ocean)	2,450
Murray	Australian Alps, New South Wales	Indian (Southern) Ocean	2,310
Irtish	Altai Mts., U.S.S.R.	Ob River	2,300
Volga	Valdai plateau, U.S.S.R.	Caspian Sea	2,300
Madeira	Confluence of Gauporé and Maumoré Rivers, Bolivia-Brazil border	Amazon River	2,000
St. Lawrence	St. Louis River, Minn.	Gulf of St. Lawrence	1,900
Purús	Southwest Amazonas, Brazil	Amazon River	1,850
Rio Grande	San Juan Mts., Colorado	Gulf of Mexico	1,800
São Francisco	Southwest Minas Geraes, Brazil	Atlantic Ocean	1,800
Yukon	Junction of Lewes and Pelly, Yukon Territory	Bering Sea	1,800
Salween	Tibet, south of Kunlun Mountains	Gulf of Martaban	1,750
Danube	Black Forest, Germany	Black Sea	1,725
Euphrates	Dumlu Dag (moun- tains), Turkey	Persian Gulf	1,700
Indus	Himalayas	Arabian Sea	1,700
Orinoco	Sierra Parima on Vene- zuela-Brazil boundary	Atlantic Ocean	1,700
Tocantins	Near Pyrenopolis, southeast Brazil	Pará River (Atlantic Ocean)	1,700
Brahmaputra	Himalayas	Ganges River (Bay of Bengal)	1,680
Nelson	Head of Bow River, west Alberta, Canada	Hudson Bay	1,660
Si Kiang	Plateau of Yunnan, southwest China	China Sea	1,650
Zambezi	11°21'S.; 24°22'E., North- ern Rhodesia, Africa	Indian Ocean	1,600
Ganges	Himalayas	Bay of Bengal	1,540
Amu Darya (Oxus)	Nicholas Range, Pamir Mountains, U.S.S.R.	Lake Aral	1,500

River	Source	Outflow	Approx. length, miles
Paraguay	Mato Grosso, Brazil	Paraná River	1,500
Yapurá	Andes, Colombia	Amazon River	1,500
Arkansas	Central Colorado	Mississippi River	1,450
Colorado	Middle Park, northern Colorado	Gulf of California	1,440
Dnieper	Valdai Hills, U.S.S.R.	Black Sea	1,400
Negro	Watershed between Ori- noco and Amazon	Amazon River	1,400
Ural	Southern Ural Moun- tains, U.S.S.R.	Caspian Sea	1,400
Ohio-Allegheny	Plateau in Potter County, Pa.	Mississippi River	1,306
Orange	Basutoland, Africa	Atlantic Ocean	1,300
Irrawaddy	Confluence of N'mai and Mali Rivers, northeast Burma	Bay of Bengal	1,250
Columbia	Columbia Lake, British Columbia	Pacific Ocean	1,214
Saskatchewan	Western Alberta, Canada	Lake Winnipeg	1,205
Darling	Central part of Eastern Highlands, Australia	Murray River	1,160
Tigris	Taurus Mts., Turkey	Euphrates River (Persian Gulf)	1,150
Sungari	Sungari Reservoir, Manchuria, China	Amur River	1,130
Don	Lake Ivan, U.S.S.R.	Sea of Azov	1,100

## Large Lakes of the World

Name and location	Area, sq. mi.	Length, miles	Maximum depth, feet	Elevation above sea level, feet
Caspian, U.S.S.R.—Iran†	169,300	795	3,612	-86
Superior, U. S. A.—Canada	31,820	383	1,290	602
Aral, U.S.S.R.	26,233	280	222	155
Victoria, East Central Africa	26,200	250	270	3,720
Huron, U. S. A.—Canada	23,010	247	750	580
Michigan, U. S. A.	22,400	321	923	580
Baikal, U.S.S.R.	13,300	411	5,413	1,515
Tanganyika, East Central Africa	12,700	450	4,708	2,536
Great Bear, Canada	12,000	195	270*	391
Great Slave, Canada	11,170	325	—	495
Nyasa, Southern Africa	11,000	350	2,580	1,650
Erie, U. S. A.—Canada	9,940	241	210	572
Winnipeg, Canada	9,398	260	70	712
Ontario, U. S. A.—Canada	7,540	193	778	245
Balkhash, U.S.S.R.	7,115	430	36	900
Ladoga, U.S.S.R.	7,000	125	730	55
Onega, U.S.S.R.	3,764	145	408	125
Rudolf, Eastern Africa	3,475	185	—	1,250
Titicaca, Bolivia—Peru	3,200	125	892	12,507
Nicaragua, Nicaragua	3,089	110	200	135
Athabaska, Canada	3,058	195	—	699
Reindeer, Canada	2,444	155	—	1,150
Issyk-Kul, U.S.S.R.	2,230	115	2,300	5,400
Koko Nor, China	2,200	66	—	10,000
Vänern, Sweden	2,143	87	292	144
Winnipegosis, Canada	2,086	122	38	831
Bangweulu, East Central Africa	1,900	60	15	3,700
Nipigon, Canada	1,870	70	—	852
Manitoba, Canada	1,817	120	12*	813
Urmia, Iran	1,750*	80-90	50	4,184
Albert, Uganda, Africa	1,640	100	50	2,037
Dubawnt, Canada	1,600	65	—	500
Great Salt, U. S. A.	1,500	75	15-25*	4,200
Van, Turkey	1,453	80	—	5,643

\* Average. † The name Caspian Sea is a misnomer; it is a land-locked lake, so classified by oceanographers.



## Volcanoes of the Earth

There are approximately 430 volcanoes (275 in the Northern Hemisphere and 155 in the Southern) with recorded eruptions in historical times. Of the 2,500 recorded eruptions, more than 2,000 have taken place in the Pacific area. Of known active volcanoes, about 80 are of the submarine type.

### ATLANTIC-INDIAN AREA

#### Mediterranean Region

*Italy:* Mt. Vesuvius, southeast of Naples (3,858 ft.). Only active volcano on mainland of Europe. Pompeii buried by an eruption, A.D. 79. Latest eruption in 1944.

*Sicily:* Mt. Etna, eastern Sicily (10,741 ft.). Two new craters formed in eruptions of Feb.-Mar., 1947. Worst eruption in 50 years occurred Nov., 1950-Jan., 1951.

*Lipari Islands* (north of Sicily): Stromboli (about 3,000 ft.). Called "Lighthouse of the Mediterranean." Erupted 1954.

#### Atlantic Area

*Canary Islands:* Pico de Teide (Teneriffe), on island of Teneriffe (12,192 ft.).

*Cape Verde Islands:* Fogo (over 8,000 ft.). Severe eruption in 1857; last until 1951.

*Iceland:* At least 25 volcanoes active in historic times. These volcanoes very similar to those in Hawaii.

Hekla (4,747 ft.). Several craters, largest about  $1\frac{1}{4}$  mi. in circumference. Most recent eruptions reported in 1947-48.

Skaptarjökull. Series of volcanoes near Skaptar; erupted in 1783 with large loss of life and produced largest known single output of lava.

Askja (4,600 ft.). Largest in Iceland.

*Jan Mayen Island:* Beerenberg, northern part of island (over 8,000 ft.). Extinct.

*British Cameroons:* Mt. Cameroon (13,353 ft.). Has several craters. Last erupted in 1922.

*Lesser Antilles* (West Indian Islands): Mt. Pelée, in northwestern Martinique (about 4,400 ft.). Eruption in 1902 destroyed town of St. Pierre and killed approximately 40,000.

#### Indian Ocean Region

*Comoro Islands* (east of northern Mozambique): One volcano, Kartala (over 8,500 ft.). Visible for over 100 miles. Last erupted in 1904.

*Réunion Island* (east of Madagascar): Piton de la Fournaise (Le Volcan) (8,610 ft.). Large lava flows.

*Tanganyika Territory:* Kilimanjaro (19,565 ft.). Extinct. Highest mountain in Africa.

### THE PACIFIC AREA

#### Northwest Portion

*Kamchatka:* 14-18 active volcanoes.

Shiveluch (over 10,500 ft.). Most northerly volcano of Kamchatka group.

Klyuchevskaya (Kluchev) (15,912 ft.). Reported active in 1946.

Koryatskaya (over 11,500 ft.). Violent eruption in 1895.

*Kurile Islands:* At least 13 active volcanoes and several submarine outbreaks.

*Japan:* at least 33 active vents.

Fujiyama (Fujisan), southwest of Tokyo (12,385 ft.). Symmetrical in outline, snow-covered. Regarded as a sacred mountain. Adzumayama (7,733 ft.).

Asamayama (8,182 ft.). Continuously active; violent eruption in 1783; latest in 1954.

Asosan (5,223 ft.). Crater 10 by 15 miles is the largest known in the world; erupted most recently in 1953, killing several students.

Bandaisan, about 125 miles north of Tokyo (9,037 ft.). Violent eruption in 1888 devastated a 27-square-mile area.

*Ryukyu archipelago:* Nakano-shima (3,485 ft.); Suwanose-shima (2,697 ft.).

*Bonin (Ogasawara) Islands:* Mt. Suribachi, on Iwo Jima (546 ft.). A sulfurous steaming volcano. Raising of U. S. flag over Mt. Suribachi was one of the dramatic episodes of World War II.

*New Britain archipelago:* Numerous active vents, including Father, on New Britain (7,500 ft.).

*Santa Cruz Islands:* Tinakula (2,200 ft.).

*New Hebrides:* Lopevi (4,755 ft.).

*Samoa archipelago:* Savaii. An eruption in 1905 did considerable damage. Niuafu (Tin Can) between Samoa and Fiji Islands has a crater 6,000 feet below and 600 feet above water.

*Philippine Islands:* about 100 eruptive centers; Hibok Hibok on Camiguin island erupted in Sept. 1950, and again in Dec. 1951, when about 750 were reported killed or missing; eruptions continued in 1952-53.

Taal, on Volcano Island in Lake Bombon (about 1,000 ft.). Crater over 7,500 ft. in diameter.

Mayon, in southeastern Luzon (7,946 ft.). An almost perfect cone. Continuous mild activity. Destructive eruption in 1897.

*Moluccas:* A volcanic chain of islands which contains several active volcanoes.

#### Hawaiian Group:

Mauna Loa (13,680 ft.). Also called "Long Mountain." Discharges more lava than any other volcano. Largest volcanic mountain in the world in cubic content, with crater of 3.7 sq. mi. Violent eruption in June, 1950, with lava pouring 25 mi. into the ocean.

Mauna Kea (13,784 ft.). Highest mountain in group.

Hualalai (8,269 ft.). Has many small pit craters. Only lava flow in historic times was in 1801.

Kilauea (4,090 ft.). A vent in side of Mauna Loa but apparently erupts independently of it. One of the most spectacular and active craters. Crater has an area of 4.14 sq. mi. Erupted 1952.

#### Southwest Portion

*Sumatra:* Ninety volcanoes have been discovered; 12 are now active. The most famous, Krakatoa, is a small volcanic island in the Sunda Strait. Numerous volcanic discharges occurred in 1883. One explosion caused the disappearance of the highest peak and the northern part of the island. Fine dust was carried around the world in the upper atmosphere. Over 36,000 persons lost their lives in resultant tidal waves, which were felt as far away as Cape Horn. Active again in 1928, 1950 and 1953.

*Java:* Thirteen of 125 volcanic centers are active. Few serious eruptions. Galunggung is famous for two destructive eruptions in 1822. It is thought that over 100 villages and about 4,000 lives were lost. Eruption of Merapi in 1954 caused number of deaths.

*Lesser Sunda Islands:* Fifteen eruptive cones. Tamboro on Soembawa (Sumbawa) (about 9,000 ft.) was 13,000 ft. prior to a severe eruption in 1815, which ejected an estimated 36 cu. mi. of material.

*Melanesian area:* Volcanoes are located on New Guinea, New Hebrides, Santa Cruz, Solomons, and on numerous other small islands. Eruption of Mt. Lamington in Papua Territory, New Guinea, in Jan., 1951, killed more than 3,000.

*New Zealand:* Tarawera, on North Island. Severe eruption in 1886 destroyed the famous pink and white sinter terraces of Rotomahana, a hot lake.

Ngauruhoe (7,515 ft.). Emits steam and vapor incessantly. Major eruptions, 1952-54.

#### Northeast Portion

*Aleutian area:* There are 32 active vents known, and numerous inactive cones.

Shisaldin, on Unimak (8,683 ft.). Latest eruption Jan., 1947.

Bogosloff, on Bogosloff island (Castle) (about 1,000 ft.). Mountain first appeared after an eruption in 1796.

#### Alaska:

Wrangell (14,005 ft.).

Katmai (about 7,500 ft.). On June 6, 1912, a violent eruption occurred, during which the "Valley of Ten Thousand Smokes" was formed. Erupted 1951, 1953.

*United States:* Lassen Peak, in California (10,453 ft.). Only observed active volcano in the United States. Last period of activity in 1914-17. Other mountains of volcanic origin include Mt. Shasta, Mt. Hood, Mt. Rainier, and the mountain that contains Crater Lake.

#### Mexico:

Popocatepetl (17,883 ft.). Crater 673 ft. deep and  $2\frac{1}{2}$  mi. in circumference. Not entirely extinct; steam still escapes.

Colima (14,239 ft.), in group that has had frequent eruptions.

Orizaba (Citlaltepetl) (18,696 ft.).

Tuxtla (4,900 ft.). Had a violent eruption in 1793 but is now quiescent.

Parícutín. First appeared in Feb., 1943. In less than a week a cone over 140 ft. high developed with a crater one quarter mile in circumference. Cone grew over 1,500 ft. in 1943. Erupted 1952.

Boquerón ("Big Mouth"). Newest volcano in Western Hemisphere, discovered Sept., 1952 on San Benedicto island, about 250 mi. south of Lower California.

#### Guatemala:

Santa María Quezaltenango (12,361 ft.). Frequent activity between 1902-08 and 1922-28 after centuries of quiescence. Most dangerously active vent of Central America. Other volcanoes include Tajumulco (13,814 ft.) and Atitlán (11,633 ft.).

*El Salvador:* Izalco, "beacon of Central America," which first appeared in 1770 and is still growing (erupted in July, 1950); San Salvador, which had a violent eruption in 1923 and Conchagua, which erupted with considerable damage early in 1947.

*Nicaragua:* Volcanoes include Telica, Coseguina and Momotombo. Between Momotombo on the west shore of Lake Managua and Coseguina overlooking the Gulf of Fonseca, there is a string of more than 20 cones, many still active. One of these, Cerro Negro, erupted in July, 1947, with considerable damage and loss of life, and again in 1948-50.

*Costa Rica:* Four volcanic cones whose bases merge are Poás (8,895 ft.), Barba (9,280 ft.), Irazú (10,525 ft.), and Turrialba (11,350 ft.).

#### Southeast Portion

*Colombia:* Huila (18,700 ft.), a vapor-emitting volcano, and Tolima (17,109 ft.).

Eruption of Puracé (15,420 ft.), 1949, killed 17.

*Ecuador:* Cotopaxi (19,344 ft.). Perhaps highest active volcano in the world. Possesses a beautifully formed cone.

Cayambe (19,170 ft.). Almost on equator. Other volcanoes include Tunguragua (16,689 ft.), Sangay (17,470 ft.), and Antisana (over 18,000 ft.).

*Peru and Bolivia:* Many active volcanoes. Misti, near Arequipa, Peru (19,167 ft.). Sajama, in Bolivia (21,391 ft.).

Licancábur, in Bolivia (about 19,500 ft.).

*Chile and Argentina:* About 25 active or potentially active; destructive eruption of Villarica, Chile, 1948; active in 1949.

## Interesting Caves and Caverns of the World

**Aggtelek.** In village of same name, northern Hungary. Large stalactitic cavern about 5 miles long.

**Altamira Cave.** Near Santander, Spain. Contains animal paintings (Old Stone Age art) on roof and walls.

**Antiparos.** On island of same name in the Grecian Archipelago. Some stalactites are 20 ft. long. Brilliant colors and fantastic shapes.

**Blue Grotto.** On island of Capri, Italy. Cavern hollowed out in limestone by constant wave action. Now half filled with water because of sinking coast. Name derived from unusual blue light permeating the cave. Source of light is a submerged opening, light passing through the water.

**Carlsbad Caverns.** Southeast New Mexico. Largest underground labyrinth yet discovered. Three levels: 754, 900, and 1,320 feet below the surface.

**Fingal's Cave.** On island of Staffa off coast of western Scotland. Penetrates about 200 ft. inland. Contains basaltic columns almost 40 ft. high.

**Ice Cave.** Near Dobsina, Czechoslovakia. Noted for its beautiful crystal effects.

**Jenolan Caves.** In Blue Mountain plateau, New South Wales, Australia. Beautiful stalactitic formations.

**Kent's Cavern.** Near Torquay, England. Source of much information on Paleolithic man.

**Luray Cavern.** Near Luray, Virginia. Has large stalactitic and stalagmitic columns of many colors.

**Mammoth Cave.** Limestone cavern in central Kentucky. Cave area is about 10 miles in diameter but has at least 150 miles of irregular subterranean passages at various levels. Temperature remains fairly constant at 54°F.

**Peak Cavern or Devil's Hole.** Derbyshire, England. About 2,250 ft. into a mountain. Lowest part is about 600 ft. below the surface.

**Postumia (Adelsberg) Grotto.** Near Postumia in Julian Alps, about 25 miles N.E. of Trieste. Stalactitic cavern, largest in Europe. Pluca (Pivka) River flows through part of it. Caves have numerous beautiful stalactites.

**Singing Cave.** Iceland. A lava cave; name derived from echoes of people singing in it.

**Wind Cave.** In Black Hills of South Dakota. Limestone caverns with stalactites and stalagmites almost entirely missing. Variety of crystal formations called "boxwork."

**Wyandotte Cave.** In Crawford County, southern Indiana. A limestone cavern with five levels of passages; one of the largest in North America. "Monumental Mountain," approximately 135 ft. high, is believed to be one of the world's largest underground "mountains."

## Geysers

Geysers exist in many volcanic regions of the world such as Japan and South America, but their greatest development is in Iceland, New Zealand and Yellowstone National Park, Wyoming, U. S. A.

**Iceland.** The principal geyser area is about 30 miles northwest of Mt. Hekla, where there are more than 100 geysers and hot springs in about two square miles. The main ones are the following:

**Great Geyser (Geysir).** Sends up a column 160 to 180 ft. high intermittently from an opening more than 9 ft. across and about 70 ft. deep.

**Strokkur (Churn).** Constant bubbling and occasional eruptions.

**New Zealand.** There is a great profusion of boiling springs, steam jets and mud volcanoes northeast of Lake Taupo on North Island. Main geysers are *Waikite*, with a 30-35 ft. column, *Pohutu* and *Waimauku*.

### United States

**Yellowstone National Park, Wyoming.** There are 120 named geysers in Yellowstone and perhaps half that number un-

named. Most of the geysers and the 4,000 or more hot springs are located in the western portion of the park. The most important are the following:

**Norris Geyser Basin** has 24 or more active geysers; the number varies. There are scores of steam vents and hot springs. *Valentine* is highest, erupting 50-75 ft. at intervals varying from 18 hr. to 3 days or more. *Minuté*, 15-20 ft. high, several hours apart. Others include *Steamboat*, *Fearless*, *Veteran*, *Vixen*, *Corporal*, *Whirligig*, *Little Whirligig* and *Pinwheel*.

**Lower Geyser Basin** has at least 18 active geysers. *Fountain* throws water 50-75 ft. in all directions at unpredictable intervals. *Clepsydra* erupts violently from four vents up to 30 ft. *Great Fountain* plays every 8 to 15 hr. in spurts from 30 to 90 ft. high.

**Midway Geyser Basin** has vast steaming terraces of red, orange, pink and other colors; there are pools and springs, including the beautiful *Grand Prismatic Spring*. *Excelsior* crater discharges boiling water into Firehole River at the rate of 6 cu. ft. per second.



*Upper Geyser Basin* includes *Artemisia*, which sends up a column 15–35 ft. every 24 to 30 hr. *Riverside* has an unusual cone; it throws water 75 ft. obliquely over the river for half an hour. Interval ranges from 6 to 8½ hr.

*Rocket* is irregular and unpredictable, as is its neighbor *Grotto*.

*Giant* erupts up to 200 ft. at intervals of 2½ days to 3 mo.; eruptions last about 1½ hr. *Daisy* sends water up to 75 ft. but is irregular and frequently inactive.

*Old Faithful* sends up a column varying from 116 to 175 ft. at intervals of about 65 min., varying from 33 to 90 min. Eruptions last about 4 min., during which time about 12,000 gal. are discharged.

*Giantess* seldom erupts, but during its active periods sends up streams 150–200 ft.

*Lion Group*: *Lion* plays up to 60 ft. every 2–4 days when active; *Little Cub* up to 10 ft. every 1–2 hr. *Big Cub* and *Lioness* seldom erupt.

*Castle* usually erupts twice daily to a height of 75 ft.

*Mammoth Hot Springs*. There are no geysers in this area. The formation is travertine. Sides of a hill are steps and terraces over which flow the steaming waters of hot springs laden with minerals. Each step is tinted by algae to many shades of orange, pink, yellow, brown, green and blue. Terraces are white where no water flows.

Other groups of geysers, hot pools and mud pots are located on the west shore of Shoshone Lake, on West Thumb Bay, at Mud Volcano, in the Grand Canyon of the Yellowstone, and on Mirror Plateau.

## Famous Ship Canals of the World

Name	Location	Year opened	Length (mi.)	Width (ft.)	Depth (ft.)	Locks
Albert .....	Belgium	1939	80.0	53.0	16.5	6
Amsterdam-Rhine .....	Netherlands	1952	45.0	164.0	41.0	3
Beaumont-Port Arthur .....	United States	1916	40.0	200.0	34.0	..
Chesapeake and Delaware .....	United States	1927	19.0	250.0	27.0	..
Houston .....	United States	1914	50.0	200.0	33.0	..
Kiel .....	Germany	1895	53.3	144.0	37.0	4
Panama .....	Canal Zone	1914	50.0	110.0	41.0	12
Sault Ste. Marie .....	Canada	1895	1.2	60.0	16.8	1
Sault Ste. Marie .....	United States	1915	1.6	80.0	25.0	4
Suez .....	Egypt	1869	87.5	197.0	34.0	..
Welland .....	Canada	1931	27.6	80.0	25.0	8

## World Extremes of Climate

Data from U. S. Weather Bureau

### Highest recorded shade temperature:

World: 136° F. at Azizia, Libya, North Africa, September 13, 1922.

United States: 134° F. at Death Valley, California, July 10, 1913.

### Lowest recorded temperature:

World: -90° F. at Verkhoyansk, Siberia, U.S.S.R., February 5 and 7, 1892; a temperature of -94° F. was reported in Siberia during the winter of 1946–47 but was not verified by the Soviet government.

United States: -70° F. at Rogers Pass, Montana, January 20, 1954.

### Highest mean annual temperature:

World: 86° F. at Massawa, Eritrea, Africa.

United States: 77.3° F. at Tavernier, Fla.

### Lowest mean annual temperature:

World: -14° F. at Framheim, Antarctica.

United States: 26.8° F. at Mt. Washington, N. H. (19-year record).

### Maximum rainfall for 24-hour period:

World: 46 inches at Baguio, Luzon, Phillipines, July 14–15, 1911.

United States: 26.12 inches at Hoegees Camp (Camp Le Roy), California, January 22–23, 1943.

### Maximum recorded rainfall in one month:

366 inches at Cherrapunji, India, July, 1861 (over 150 inches fell in 5 consecutive days in August, 1841). Average annual rainfall at Cherrapunji is 424 inches. The 28-year average annual rainfall at Mt. Waialeale, Island of Kauai, Hawaiian Islands, however, is 489 inches.

### Minimum recorded rainfall:

World: .04 inch at Iquique, Chile, average yearly fall during 40 years.

United States: 1.73 inches at Greenland Ranch, California, average yearly fall during 38 years. During one period of 401 consecutive days, this station recorded no rain.

Average annual precipitation for the United States is about 29 inches.

Louisiana is the wettest state, with an annual average (62 years) of 55.68 inches.

Nevada is the driest state, with an annual average (64 years) of 8.60 inches.

Highest local average annual rainfall in the United States was 150.73 inches at Wynoochee Oxbow, Washington, based on a 13-year record.

Greatest 6-hour fall was at Lake Charles, La., 15.38 inches, on June 19, 1947. Greatest 24-hour U. S. rain (unofficially observed) was 38.2 inches, Thrall, Tex., Sept. 9-10, 1921.

Heavy snowfall records include 60 inches in one day at Giant Forest, California; 87 inches in 27½ hours and 95 inches in 32½ hours at Silver Lake, Colorado; and 42 inches in 2 days at Angola, New York. In the New York City blizzard of Dec. 26, 1947, 25.8 inches of snow fell in about 20 hours, almost 5 inches more than fell in the blizzard of March, 1888. Greatest seasonal snowfall was 884 inches, over 73 feet, at Tamarack, California, during 1906-07.

Large hailstones include one 17 inches in circumference and weighing 1½ pounds which fell at Potter, Nebraska, July 6, 1928.

## Ancient Empires

The *Egyptian* and *Babylonian* empires, Near Eastern civilizations whose cultures mark the beginning of written history, had their origins in the nebulous period of ancient history prior to the year 4000 B.C. They developed rapidly in the fertile river valleys of the Nile in Egypt and the Tigris-Euphrates in Mesopotamia after the discovery of metals and the invention of writing. Their governments were all-powerful, with the people subjugated and without political rights. The Egyptians regarded their king as a god. In Babylon, the ruler was a priest-king, earthly representative of the gods. Nevertheless, these Near East cultures made great contributions to the eternal march of man; they advanced the ways of making and doing things, produced the earliest literature, developed the principles of law (the code of Hammurabi, Babylonian king of the 18th [or possibly 17th] century B.C., the oldest code of law) and science, learned the basic principles of art, and evolved early religious worship.

The influence of Babylon and Egypt was felt in the rise of the Semitic tribes of Syria, the Hittites in Asia Minor, and the people of the Aegean region. Between the years 1200 and 800 B.C., the small Syrian states grew to great power and then were overwhelmed by the great empire of the *Assyrians*, the warlike peasants of the Tigris valley, who took the lessons learned from the Babylonians and spread that culture over their domains. The Assyrians, like the Egyptians and the Babylonians, in turn fell under the power of the *Persian* kings in the century between 600 and 500 B.C. By 525 B.C., the Persian Empire extended from India to Egypt, the greatest the world had ever seen.

The lessons learned by these early Near Eastern civilizations were transmitted to *Greece*, which developed its illustrious empire in the Aegean region, after the inhabitants of the island of Crete had absorbed the Egyptian culture. The mainland Greeks overthrew the Cretans and in turn were succeeded by the Doric Greeks, who spread their culture across the Aegean, the Asia Minor coast, and into the Mediterranean and Black Sea regions. The char-

acteristic Greek political institution was the city-state, first ruled by kings and often temporary monarchical tyrannies, and finally by the participation of free citizens. Literature and the arts flourished, and by the 5th century B.C., when Athens became the great city of the Greeks, drama had risen to full maturity with the great tragedies of Sophocles and Euripides and the comedies of Aristophanes. Architecture and art advanced apace. The Greeks, learning much from their Egyptian teachers, produced such superb buildings as the Parthenon and created amazingly beautiful statues through the use of living models. Religion, which was closely linked with art, also flourished, as did the development of philosophy, under the great Socrates (470?-399 B.C.), Plato (427?-347 B.C.), and Aristotle (384-322 B.C.). Wars weakened the city-states, and they fell to Alexander the Great in the 4th century B.C.

Last among the great ancient empires was the *Roman*, which developed in Italy and gained control over the Mediterranean region after absorbing the culture of Greece and combining with it new principles of law and art and teaching this new learning to the West. The development of the Roman civilization began in 510 or 509 B.C., when the peoples on the peninsula of Italy freed themselves from the rule of the Etruscans. The Romans, with a republican form of government, speedily conquered Italy and the Mediterranean region, and the Roman governors became men of great wealth, corrupting the city-state system and making it a graft-ridden machine of exploitation. The failure of the government to check this self-seeking influence brought on a revolt which resulted eventually in the rise of Julius Caesar to dictatorship in 46-44 B.C. Caesar's murder in the Senate at Rome was followed in 27 B.C. by the establishment of the one-man rule of Augustus over the Roman Empire. Legal practices were developed and became the foundations of modern law. Great roads, bridges and buildings were constructed. This great ancient civilization began to crumble in the 3d century A.D.

## Languages of the World

(spoken natively by 5,000,000 or more people)

Language	Number speaking	Language	Number speaking
American Indian: including Mayan, Quéchuá and 750-1,000 other languages and dialects	15,000,000	Bisayan, Ilocano, Javanese, Madurese, Malay, Malagasy, Sundanese, Tagalog	105,000,000
Amharic (Ethiopia)	5,600,000	Iranian: including Baluchi, Kurdish, Persian, Pushtu	26,500,000
Annamese (Indo-China)	20,000,000	Italian	50,000,000
Arabic	65,000,000	Japanese	90,000,000
Bantu: including Swahili, Zulu (S. Africa)	45,000,000	Javanese	41,000,000
Bengali (India; Pakistan)	70,000,000	Kanarese (India)	16,000,000
Berber dialects (N. Africa)	6,000,000	Korean	30,000,000
Bihari (India)	35,000,000	Lahnda (India; Pakistan)	13,000,000
Bisayan (Philippines)	9,000,000	Madurese (Indonesia)	6,500,000
Bulgarian	7,000,000	Malay (Indonesia)	14,000,000
Burmese	13,000,000	Malayalam (India)	12,000,000
Catalan (Spain)	6,000,000	Marathi (India)	25,000,000
Chinese: including Mandarin, Cantonese and others	475,000,000	Munda (India)	5,000,000
Cushitic: including Somali (Ethiopia)	7,000,000	Oriya (India)	13,000,000
Czech	2,500,000	Persian	12,000,000
Dravidian: including Kanarese, Malayalam, Tamil, Telugu (India)	95,000,000	Polish	30,000,000
Dutch	15,000,000	Portuguese	63,000,000
English	265,000,000	Punjabi (India; Pakistan)	22,000,000
Ethiopian: including Amharic, Finno-Ugric: including Estonian, Finnish, Hungarian, Karelian, Lappish	6,400,000	Pushtu (Afghanistan; Pakistan)	8,000,000
Flemish (Belgium)	5,000,000	Rajasthani (India; Pakistan)	17,000,000
French	65,000,000	Rumanian	16,000,000
German	100,000,000	Russian	200,000,000
Greek	8,000,000	Serbo-Croatian (Yugoslavia)	15,000,000
Gujarati (India; Pakistan)	20,000,000	Siamese	16,000,000
Hausa (Central Africa)	9,000,000	Sinhalese (Ceylon)	5,500,000
Hindi (India; Pakistan)	180,000,000	Spanish	150,000,000
Hungarian	13,000,000	Sudanic: including Hausa (Central Africa)	75,000,000
Indic: including Assamese, Bengali, Bihari, Gujarati, Hindi, Lahnda, Marathi, Oriya, Punjabi, Rajasthani, Sindhi, Sinhalese	415,000,000	Sundanese (Indonesia)	13,000,000
Indonesian: including Balinese,		Swahili (E. Africa)	8,000,000
		Swedish	7,000,000
		Tagalog (Philippines)	5,000,000
		Tamil (India)	27,000,000
		Telugu (India)	33,000,000
		Tibeto-Burman: including Tibetan and Burmese	20,000,000
		Turkic: including Kazakh, Tatar, Turkish, Uzbek	45,000,000
		Turkish	20,000,000
		Uzbek (U.S.S.R.)	6,000,000
		Yiddish	5,000,000

## Universities—Ancient and Modern

Universities, in the modern sense of the term, sprang up in the 12th and 13th centuries in response to the resurgence of learning that preceded the Renaissance in Europe. Procedure at the early universities was informal, with students gathering at some place in a city to listen to a pre-eminent teacher. There were no campuses, buildings or endowments. Actually, the term "university" once meant a guild or corporation; there were, in the medieval period, "universities" of bootmakers, weavers, etc. Thus the university of learning was similar in organization to the guilds. The students filled the role of apprentices and the teachers were the masters.

The first European university was that of *Salerno* in the 9th century, when it was known as a school of medicine. By the 11th century, it had become one of the most famous medical schools of Europe.

*University of Bologna.* Originated about 1200 as student guilds for protection against the merchants and citizens of Bologna who had raised prices of food and lodging. It was famous for its legal scholars. The students were organized into two guilds and exercised a great deal of authority over the administration.

Other Italian universities famed in the Middle Ages included those at *Arezzo*, *Fer-*



*rara, Florence, Modena, Naples, Padua, Padua, Perugia, Siena and Vicenza.*

*University of Paris.* Originated between 1150 and 1170 in a cathedral school on the Ile de la Cité, it was later moved to the left (south) bank of the Seine, although it remained under the authority of the chancellor of Notre Dame. It developed into the most famous continental center of learning of its day. Its four principal schools were theology, medicine, law and arts. By the 14th century, the university had some 40 colleges, of which the *Sorbonne* became the most celebrated.

The universities of Paris and Bologna had a marked influence in the subsequent creation of other university centers. About 1167-68 there was a migration of students from Paris to *Oxford* (founded in the 12th century) and about 1210, from Oxford to *Cambridge* (also founded in the 12th century).

Other famous universities of the Middle Ages include the *University of Toulouse* (1233), *Salamanca* (1243), *Seville* (1254), *Orléans* (1305), *Valladolid* (1346), *Prague* (1347), *Kraków* (1364), *Vienna* (1364), *Erfurt* (1379), *Heidelberg* (1385), *Cologne* (1388), *Leipzig* (1409), *Rostock* (1419) and *Louvain* (1426).

### The Renaissance

The Renaissance gave fresh impetus to the universities of Europe. In France three of importance arose in the 15th century—the *University of Aix* (1409, Provence), the *University of Poitiers* (1431) and the *University of Caen* (1437).

Other French institutions of note that arose in this era were at *Bordeaux* (1441), *Valence* (1452), *Nantes* (1463) and *Bourges* (1465). New European universities were also founded at *Trier* (1450), *Freiburg* (1455), *Ingolstadt* (1459), *Basel* (1460), *Budapest* (1475), *Mainz* (1476), *Uppsala* (1477), *Tübingen* (1477), *Copenhagen* (1479), *Wittenberg* (1502), *Frankfurt on Oder* (1506) and *Coimbra* (1537).

*St. Andrews*, founded in 1411, was the first university in Scotland. Others were the *University of Glasgow* (1453) and the *University of Aberdeen* (1494). The *College of Edinburgh* was established in the post-Reformation period (1582). In Ireland, *Trinity College* was founded in Dublin in 1591.

### Reformation and Post-Reformation

Until the Reformation, most of the institutions of higher learning in Europe were under the tutelage of the Catholic Church. After 1520, however, many established universities declared their independence of the Church. Cromwell's rule brought about new scholastic methods at both Oxford and Cambridge and the es-

tablishment of new colleges thoroughly imbued with Protestantism.

But the first Protestant university was that of *Marburg*, Germany, founded in 1527. Other Protestant universities were: *Königsberg* (1544); *Jena* (1558); *Helmstedt* (1575); *Altdorf* (1575); *Giessen* (1607); *Strasbourg* (1621); *Halle* (1693).

### 18th, 19th and 20th Centuries

Among the more famous institutions in this era was *Göttingen* (1736), whose school of history became celebrated throughout Europe. Others were: *Erlangen* (1743); *Berlin* (1809); *Lemberg* (Lwów) (1816); *Bonn* (1818); *Helsingfors* (1828); the *National University at Athens* (1837); *Bucharest* (1864); *Tokyo* (1877); *Sofia* (1888) and *Kyoto* (1897).

Among the more famous British universities established in the 19th and 20th centuries were the *University of London* (1828); *Manchester* (1851); the *Mason University College* in Birmingham, later *Birmingham University* (1900); *Liverpool* (1903); *Leeds* (1904); and the *University of Sheffield* (1905). The *University of Wales* (1893) is composed of the colleges of *Aberystwyth*, *Bangor* and *Cardiff*.

There are many large and important universities in the British Commonwealth. In Canada, the famous *McGill University* in Montreal was founded in 1821. Others are the *University of Toronto* (1827); *Queens University* at Kingston, Ont. (1841); *Laval University*, Quebec (1852); *Dalhousie*, Halifax (1818), and *Montreal University* (1878).

The early universities in India were patterned after London University rather than on the Oxford-Cambridge style, and were purely examining institutions. *Calcutta*, *Bombay* and *Madras* universities were founded in 1857 as examining bodies.

In Australia, the state plays an important role in the development of universities. The *University of Melbourne* (1853) has the largest enrollment. Among the others are *Adelaide* (1874); *Tasmania* (1890); *Queensland* (1909); *Sydney* (1850), and *Western Australia* (1911).

There are also many well-endowed universities in New Zealand, South Africa, and other parts of the Commonwealth.

By 1800, Russia had only three universities—*Vilna* (1578), *Dorpat* (1632) and *Moscow* (1755). Other institutions developed later were the *University of Kharkov* (1804); *Kazan* (1804); *Warsaw*, now Polish (originally established 1816, but closed 1832-69); *St. Petersburg* (1819); *St. Vladimir* in Kiev (1835); *Odessa* (1865) and *Tomsk*, in Siberia (1888). The building of universities after the Revolution of 1917 was spurred by the Soviet government.

In China, the growth of universities was hampered by the chaotic state of the government in the 1900's, the recurring civil wars and the conflict with Japan.

## The United States

Universities in the United States marched in step with the progress of the nation. The early settlers brought a heritage of European culture which they planted in New England soil. The first university in the country was started as *Harvard College* in 1636, with an endowment totaling 800 pounds. Harvard was to become probably the most famous of the American universities.

The *College of William and Mary* (1693) was the second institution of higher learning established in the colonies. Others started during the colonial period (current names only) are: *Yale* (1701); *University of Pennsylvania* (1740); *Princeton* (1748); *Washington and Lee* (1749); *Columbia* (1754); *Brown* (1764); *Rutgers* (1766) and *Dartmouth* (1770).

After the Revolution of 1776, the state tax-supported university was established. The *University of Virginia* (1819) was a notable early example of this type.

Colleges for women grew up in the second quarter of the 19th century. Among these are: *Mt. Holyoke* (1837); *Elmira* (1855); *Vassar* (1861); *Wells* (1868); *Hunter* (1870); *Wellesley* (1870); *Smith* (1871) and *Bryn Mawr* (1880).

In the latter part of the 19th century, universities established by private endowments arose. Typical of these are: *Cornell* (1865), which is also a land-grant institution; *Johns Hopkins* (1876); *Stanford* (1885) and the *University of Chicago* (1890).

## Libraries of the World

### Europe and Asia

Among the great libraries of the world, the *British Museum* remains in the first rank with more than 6,000,000 printed volumes and manuscripts. It contains such outstanding treasures as the *Codex Alexandrinus* and the *Codex Sinaiticus* of the Bible, the best collection of Greek papyri from Egypt, and vast collections of original historical manuscripts of incalculable value. Some 150,000 volumes were destroyed in air raids during World War II, but many were replaced later.

One of the finest libraries in the world is the *Bibliothèque Nationale* in Paris, which has approximately 6,000,000 volumes, 150,000 manuscripts, 450,000 medals and coins, and 5,000,000 prints and engravings.

The *State Library* in Berlin, founded in 1659-61, was combined in 1947 with the library of the University of Berlin to form a new institution known as the *Öffentliche Wissenschaftliche Bibliothek*. Prior to World War II, the *State Library* had 2,850,000 volumes; the new combined library had only 1,500,000. The *State Library* at Munich also suffered extensive war losses, with some 500,000 volumes destroyed; it now contains about 2,000,000. Estimates have placed the war losses of all German libraries at between 20 and 25 million volumes.

The *Nationalbibliothek* in Vienna has about 1,450,000 volumes and a large collection of papyri.

While not as large as some of the European state libraries, the *Biblioteca Apostolica Vaticana* in Rome has many priceless old manuscripts bequeathed to the Vati-

can over the centuries, including the *Codex Vaticanus*.

Three of the more important Italian libraries are the *Biblioteca Nazionale* in Naples, with about 1,400,000 volumes; the *Biblioteca Nazionale Centrale* in Florence, with 3,450,000 volumes, manuscripts and pamphlets and the *Biblioteca Nazionale Centrale* in Rome, with approximately 1,940,000 volumes.

Other large European libraries are the *Bibliothèque Royale* in Brussels (2,000,000 volumes), the *Biblioteca Nacional* in Madrid (1,500,000), the *University Library* at Amsterdam (more than 1,500,000) and the *Royal Library* in Stockholm (800,000). The *Lenin State Library* in Moscow is said to contain 15,000,000 volumes (a figure that undoubtedly includes duplications), besides many collections of valuable historical documents. In Leningrad, the *Public Library* claims 10,000,000 volumes, and the *Libraries of the Academy of Sciences* some 8,000,000. There are said to be 300,000 libraries in all parts of the U.S.S.R.

In the Far East, the most extensive libraries are found in Japan, although war damage in 1944-45 was severe. In Tokyo, the *National Diet Library* (formerly the *Imperial Library*) was organized in 1948 as a deposit center. With its various branches, it contains an estimated 3,500,000 volumes. The *University Library* at Kyoto has about 1,700,000.

### The United States and Canada

The earliest libraries in the colonial era were privately owned, although in 1731 Benjamin Franklin projected the first subscription library in Philadelphia. Endowments helped to set up many of the large

libraries, although many of these institutions are now receiving state or municipal support.

The largest library in the United States is the *Library of Congress*, established in 1800 by Congress. In 1954, it contained more than 10,000,000 books and pamphlets. It extends services to members of Congress and other government departments, and also offers excellent facilities for persons engaged in scholarly research.

The *New York Public Library*, with more than 5,800,000 volumes, is the largest public library in the U. S.

The *American Library Directory* for 1951 listed 11,034 libraries in the U. S., including 6,416 public (with 2,364 branches), 1,425 college and university, 1,399 special and 1,794 other types.

The growth of libraries attached to colleges and universities in the United States has been phenomenal, and some of the

university libraries are among the largest in the country. Those with more than 1,000,000 volumes each in 1953 were as follows: Harvard, 5,700,000; Yale, 4,140,000; University of California, including branches, 3,059,000; University of Illinois, 2,570,000; Princeton, 2,000,000; Columbia, 1,980,000; University of Chicago, 1,906,000; Cornell, 1,560,000; University of Michigan, 1,512,000; University of Minnesota, 1,417,000; University of Pennsylvania, 1,276,000; Stanford, 1,250,000; Duke, 1,085,000; and Northwestern, 1,031,000.

In Canada, the most important public library is that of Toronto, which has more than 800,000 volumes. Large Canadian university libraries include those at Queens (230,000), Toronto (545,000), McGill (650,000) and Laval (375,000). The *American Library Directory* for 1951 listed a total of 806 libraries in Canada, including 478 public.

## Museums of the World

(For U. S. Museums see INDEX.)

The modern museum originated during the Renaissance, when the revival of interest in the arts and classical antiquity led princes, nobles and humanists to amass specimens of historical value and to house their collections in special buildings or galleries.

### Art Museums

The *British Museum*, London, contains some of the most famous historical objects of the world, including the Elgin Marbles and the Rosetta Stone.

*Victoria and Albert Museum*, London, whose primary object is to furnish examples to illustrate the history of art, emphasizes architecture and sculpture, ceramics, engraving, book production, paintings, textiles, etc. The library is devoted principally to fine and applied arts of all countries.

*National Gallery*, London, contains a great number of old Masters, including paintings by Da Vinci, Michelangelo, Tintoretto, Mantegna, Titian, Bellini, Jan van Eyck, Rubens, Rembrandt, Holbein, Constable and Turner.

*Tate Gallery*, London, established as part of the National Gallery, was badly damaged during air raids of World War II, but was completely restored by 1949.

*Wallace Collection*, London, has many objects d'art and curios of French origin, and first-rank canvases and etchings of Italian, Spanish, Flemish, Dutch and English artists.

In France, the most famous gallery is the *Louvre* in Paris, noted for the magnificence of its architecture as well as for its art collection, which is the largest in

the world. Other Parisian museums of importance are *Cluny*, *Rodin*, *Guimet*, and *Carnavalet*.

Among the magnificent Italian museums, the *National Museum* at Naples contains one of the best arranged and classified collections. The *Uffizi Gallery* in Florence, founded by the Medicis, has one of the world's largest and best collections of Italian art. Other galleries in Florence are the *Gallery of Modern Art* (*Pitti Palace*) and the *National Museum* (*Bargello*). Rome has numerous museums, including several in the Vatican.

In Berlin, the *National Gallery* was damaged during World War II.

The *Royal Museum of Fine Arts* in Brussels has a fine collection of French, Flemish and Dutch masters and houses many canvases by Rubens, Van Dyck, Jordaens, Rembrandt, Frans Hals and Jan Steen.

The *State Museum* in Amsterdam contains superb works by Rembrandt, Vermeer and others.

Among the notable art museums in other countries are the world-famous *Museo del Prado* in Madrid; the *Tretyakov Gallery* and the *Pushkin State Museum of Fine Arts* in Moscow; the *Hermitage State Museum* in Leningrad; and the *National Museum* in Tokyo, famed for its many Oriental paintings and examples of Oriental workmanship in lacquer, jade, ivory and metal.

### Science Museums

The *Ashmolean Museum*, oldest in Great Britain, was founded in 1683 by Oxford



University and houses a collection of archeological and classical rarities.

*Science Museum* of London has exhibits of scientific instruments and appliances which review the progress of science and the history of invention. Other London museums of science are the *Natural History (British Museum)*, the *Imperial War Museum* (exhibits of both World Wars) and the *Geological Museum*.

The *Liverpool Museums* contain valuable collections of natural history and antiquities and are divided into departments of zoology, botany, geology, archeology and ethnology. The buildings were almost completely destroyed during World War II, although most of the exhibits were saved.

The *Manchester Museum* serves as both a municipal and a university museum. The *Bristol Museum* contains departments of geology, zoology, botany, archeology and Bristol antiquities. The *National Museum of Wales* at Cardiff has departments of art, archeology, botany, geology and zoology.

In Edinburgh, Scotland, are the famed *Royal Scottish Museum*, which has collections in art, ethnography, natural history, technology and archeology; and the *National Museum of Antiquities of Scotland*, noted for its coin and manuscript collections.

The *National Museum* in Dublin and the *Municipal Museum* in Belfast have important science collections.

Notable institutions of continental Europe include the *Natural History Museum* in Paris, the *Museum of Oceanography* in Monaco, the *Natural History Museum* in Lisbon, the *State Museum of Geology and Mineralogy* in Leyden (Netherlands), the *Museum of Natural History* in Stock-

holm, the *Natural History Museum* in Vienna, the *Hungarian National Museum* in Budapest, the *National Museum* in Prague, and the various science museums in Berne, Geneva, Zurich and Neuchâtel, Switzerland. Most larger cities of the U.S.S.R. have science museums of varying sizes, some specializing in local exhibits of natural history.

Famous science museums in Germany prior to World War II included the various sections of the *Staatliche Museen* in Berlin (re-established after the war) and the museum of ethnography in Hamburg.

In Calcutta is the *Indian Museum*, outstanding for its marine fauna and vertebrate fossils, and in Bombay the *Victoria and Albert Museum*.

In Australia are the *Queensland Museum* and the *Botanic Museum* in Brisbane, the *South Australian Museum* in Adelaide, and the *Australian Museum* in Sydney.

New Zealand contains the *Canterbury Museum*, Christchurch, rich in local fauna, flora and geological items, and a Maori and Polynesian ethnological collection.

In Africa, the *South African Museum*, Capetown, holds general and local history collections and others illustrating anthropology, ethnology and archeology. The *Durban Museum* contains much anthropological material. In Cairo are the notable collections of the *Egyptian Museum*.

Other museums of note include the *Archeological Museums* at Istanbul, the *Tokyo Science Museum*, the *National Museum of Natural History* in Santiago (Chile), the *National Museum* at Rio de Janeiro, and the *Argentine National Museum of Natural Sciences* at Buenos Aires.

## Zoological Gardens

North America has more than 30 major zoos, in the United States, Canada and Mexico. The *Quebec Zoological Society's* collection is made up of Canadian species; Toronto has many exotic species.

The first zoological garden in the United States was established in Philadelphia in 1874. Since that time nearly every large city in the country has acquired a zoo. Among the largest are the celebrated *Bronx Zoo* and the *Central Park Zoo* in New York, the *Lincoln Park Zoo* and the *Brookfield Zoo* in Chicago, and those in St. Louis, Cincinnati, Detroit, Kansas City and San Diego. The *National Zoological Park* in Washington, D. C., in a beautiful setting of hills, woods and streams, was established in 1890 by an act of Congress. Some of the U. S. zoos exhibit their collections in open-air, barless pits; the Brookfield Zoo is an example.

In Europe, zoological gardens have long been popular public institutions. The *Jardin d'Acclimatation*, in the Bois de Boulogne, Paris, was established in 1858, and a model zoo at Vincennes was added in 1937 for the Paris Exposition.

Germany had about 20 zoological gardens, many of which were developed in the peacetime years between World Wars I and II. Large zoos were located in Berlin and Frankfurt am Main. In Munich, the animals were grouped according to the continent of their origin. Others were established at Dresden, Leipzig and Cologne. At Stellingen, the *Hagenbeck Garden* became an outstanding show place and distributing center for animals. Smaller collections were established at Düsseldorf, Elberfeld and Hanover. Several German zoos, notably that at Berlin, were destroyed during World War II.

The *Schönbrunn* at Vienna is one of the oldest zoos in Europe. The Budapest zoological gardens house a fine collection of European birds. At Antwerp, the *Royal Zoological Society* founded a large menagerie in 1843. It was seriously damaged by German bombs during World War II.

In the British Isles, the outstanding collection is in the garden of the *London Zoological Society* in Regent's Park. Although this zoo received a number of direct bomb hits in 1940-41 and again in 1944, it remained open throughout World War II; visitors during this period numbered 6,500,000. Manchester and Clifton have smaller gardens, and the one at Edinburgh is famous for its collection of pen-

guins. The *Dublin Zoo* is noted for its lions, many of which were born there.

The Amsterdam zoo, with its East Indian collection and its aquarium, and the Rotterdam gardens are the two best known in the Netherlands. Built on a high elevation, the *Skansen Zoo* in Stockholm exhibits its north European specimens. The most important gardens in the U.S.S.R. are found in Moscow, where northern as well as exotic species are collected. The zoo at Rome has part of its collection confined in barless pits. At Lisbon there is a small zoological garden, and in Madrid a part of the original royal menagerie. A new zoo notable for its landscaping was opened at Naples, Italy, in 1952.

## Famous Structures

(See also Seven Wonders of the World.)

### Ancient

*The Great Sphinx of Egypt*, one of the wonders of ancient Egyptian architecture, adjoins the pyramids of Giza and has a length of 189 ft. It was built in the 4th dynasty and was used as a temple.

Other Egyptian buildings of note include the *Temples of Karnak and Edfu* and the *Tombs at Beni Hassan*.

*The Parthenon of Greece*, built on the Acropolis in Athens, was the chief temple to the goddess Athena. It was believed to have been completed by 438 B.C. The present temple remained intact until the 5th century A.D. Today, though the Parthenon is in ruins, its majestic proportions are still discernible.

Other great structures of ancient Greece were the *Temples at Paestum* (about 540 and 420 B.C.); the *Temple of Poseidon* (about 460 B.C.); the *Temple of Apollo* at Corinth (about 540 B.C.); the *Temple of Apollo* at Bassae (about 450-420 B.C.); the famous *Erechtheum* atop the Acropolis (about 421-405 B.C.); the *Temple of Athena Niké* at Athens (about 426 B.C.); the *Olympieum* at Athens (174 B.C.-A.D. 131); the *Athenian Treasury* at Delphi (about 515 B.C.); the *Propylaea* of the Acropolis at Athens (437-432 B.C.); the *Theater of Dionysus* at Athens (about 350-325 B.C.); the "*House of Cleopatra*" at Delos (138 B.C.) and the *Theater* at Epidaurus (about 325 B.C.).

*The Colosseum (Flavian Amphitheater) of Rome*, the largest and most famous of the Roman amphitheaters, was opened for use A.D. 80. Elliptical in shape, it consisted of three stories and an upper gallery, rebuilt in stone in its present form in the third century A.D. Its seats rise in tiers, which in turn are buttressed by concrete vaults and stone piers. It could seat between 40,000 and 50,000 spectators. The

Colosseum was principally used for gladiatorial combat.

*The Pantheon* at Rome, begun by Agrippa in 27 B.C. as a temple, was rebuilt in its present circular form by Hadrian (A.D. 110-25). Literally the Pantheon was intended as a temple of "all the gods." It is remarkable for its perfect preservation today, and it has served continuously for 20 centuries as a place of worship.

Famous Roman arches include the *Arch of Constantine* (about A.D. 315) and the *Arch of Titus* (about A.D. 80).

### Later European

*St. Mark's Cathedral* in Venice (1063-67), one of the great examples of Byzantine architecture, was begun in the 9th century. Partly destroyed by fire in 976, it was later rebuilt as a Byzantine edifice.

Other famous Byzantine examples of architecture are *St. Sophia* in Constantinople (A.D. 532-37); *San Vitale* in Ravenna (542); *St. Paul's Outside the Walls*, Rome (5th century); the *Kremlin* baptism and marriage church, Moscow (begun in 1397); and *St. Lorenzo Outside the Walls*, Rome, begun in 588.

*The Cathedral Group* at Pisa (1067-1173), one of the most celebrated groups of structures built in Romanesque style, consists of the cathedral, the cathedral's baptistery, and the *Leaning Tower*. This trio forms a group by itself in the northwest corner of the city. The cathedral and baptistery are built in black and white marble. The campanile (Leaning Tower) is 179 ft. high and leans more than 16 feet out of the perpendicular. There is little reason to believe that the architects intended to have the tower lean.

Other examples of Romanesque architecture include the *Vézelay Abbey* in France (1130); the *Church of Notre-Dame-*

*du-Port* at Clermont-Ferrand in France (1100); the *Church of San Zeno* (begun in 1138) at Verona, and *Durham Cathedral* in England.

The *Alhambra* (1248-1354), located in Granada, Spain, is universally esteemed as one of the great masterpieces of Mohammedan architecture. Designed as a palace and fortress for the Moorish monarchs of Granada, it is surrounded by a heavily fortified wall more than a mile in perimeter. The location of the Alhambra in the Sierra Nevada provides a magnificent setting for this jewel of Moorish Spain.

The *Tower of London* is a group of buildings and towers covering 13 acres along the north bank of the Thames. The central *White Tower*, begun in 1078 during the reign of William the Conqueror, was originally a fortress and royal residence, but was later used as a prison. The *Bloody Tower* is associated with Anne Boleyn and other notables.

*Westminster Abbey*, in London, was begun in 1045 and completed in 1065. It was rebuilt and enlarged in 1245-50.

*Notre-Dame de Paris* (begun in 1163), one of the great examples of Gothic architecture, is a twin-towered church with a steeple over the crossing and immense flying buttresses supporting the masonry at the rear of the church.

Other famous Gothic structures are *Chartres Cathedral* (12th century); *Sainte Chapelle*, Paris (1246-48); *Laon Cathedral*, France (1160-1205); *Rheims Cathedral* (about 1210-50; rebuilt after its almost complete destruction in World War I); *Rouen Cathedral* (13th-16th centuries); *Amiens Cathedral* (1218-69); *Beauvais Cathedral* (begun 1247); *Salisbury Cathedral* (1220-60); *York Minster* or the *Cathedral of St. Peter* (begun in the 7th century); *Milan Cathedral* (begun 1386); and *Cologne Cathedral* (13th-19th centuries; badly damaged in World War II).

The *Duomo* (cathedral) in Florence was founded in 1298, completed by Brunelleschi and consecrated in 1436. The oval-shaped dome dominates the entire structure.

The *Vatican* is a group of buildings in Rome comprising the official residence of the Pope. The *Basilica of St. Peter*, the largest church in the Christian world, was begun in 1450. The *Sistine Chapel*, begun in 1473, is noted for the art masterpieces of Michelangelo, Botticelli and others. The *Basilica of the Savior* (known as *St. John Lateran*) is the first-ranking Catholic Church in the world, for it is the cathedral of the Pope.

Other examples of Renaissance architecture are the *Palazzo Vecchio*, the *Palazzo Pitti* and the *Palazzo Strozzi* in Florence; the *Farnese Palace* in Rome; *Palazzo Grimani* (completed about 1550) in Venice;

the *Escorial* (1563-93) near Madrid; the *Town Hall* of Seville (1527-32); the *Louvre*, Paris; the *Château* at Blois, France; *St. Paul's Cathedral*, London (1675-1710; badly damaged in World War II); the *Ecole Militaire*, Paris (1752); the *Pazzi Chapel*, Florence, designed by Brunelleschi (1429); the *Palace of Fontainebleau* and the *Château de Chambord* in France.

The *Palace of Versailles*, containing the famous Hall of Mirrors, was built during the reign of Louis XIV and served as the royal palace until 1793.

Outstanding European buildings of the 18th and 19th centuries are the *Superga* at Turin, the *Hôtel-Dieu* in Lyon, the *Belvedere Palace* at Vienna, the *Royal Palace* of Stockholm, the *Opera House* of Paris (1863-75); the *Bank of England*, the *British Museum*, the *University of London* and the *Houses of Parliament*, all in London; the *Panthéon*, the *Church of the Madeleine*, the *Bourse* and the *Palais de Justice* in Paris.

The *Eiffel Tower*, in Paris, was built for the Exposition of 1889 by Alexandre Eiffel. It is 984 ft. high.

#### Asiatic and African

The *Taj Mahal* (1632-50), at Agra, India, built by Shah Jahan as a tomb for his wife, is considered by some as the most perfect example of the Mogul style and by others as the most beautiful building in the world. Four slim white minarets flank the building, which is topped by a white dome; the entire structure is of marble.

Other examples of Indian architecture are the temples at Benares and Tanjore.

Famed Mohammedan edifices are the *Dome of the Rock* or *Mosque of Omar*, Jerusalem (A.D. 691); the *Citadel* (1166), and the *Tombs of the Mamelukes* (15th century), in Cairo; the *Tomb of Humayun* in Delhi; the *Blue Mosque* (1468) at Tabriz and the *Tamerlane Mausoleum* at Samarkand.

*Angkor Vat*, outside the city of Angkor Thom, Cambodia, is one of the most beautiful examples of Cambodian or Khmer architecture. The sanctuary was built during the 12th century.

*Great Wall of China* (228 B.C.?), designed specifically as a defense against nomadic tribes, has numerous large watch towers which could be called buildings. It was erected by Emperor Ch'in Shih Huang Ti and is 1,400 miles long. Built mainly of earth and stone, it varies in height between 18 and 30 feet.

Typical of Chinese architecture are the pagodas or temple towers. Among some of the better known pagodas are the *Great Pagoda of the Wild Geese* at Sian (founded in 652); *Nan t'a* (11th century) at Fang Shan; the *Pagoda of Sung Yueh Ssu* (A.D. 523) at Sung Shan, Honan.



Other well-known Chinese buildings are the *Drum Tower* (1273), the *Three Great Halls* in the Purple Forbidden City (1627), *Buddha's Perfume Tower* (19th century), the *Porcelain Pagoda* and the *Summer Palace*, all at Peiping.

#### United States

*Rockefeller Center*, from 5th to 6th Aves. and from 48th to 51st Sts. in New York City, occupies 12½ acres and contains 15 buildings, the highest being the 70-story *RCA Building*.

*Grant's Tomb*, at Riverside Dr. near 122nd St. in New York City, contains the bodies of Ulysses S. Grant and his wife. It was completed in 1897.

*The Cathedral of St. John the Divine*, at Cathedral Pkwy. and Amsterdam Ave. in New York City, was begun in 1892 but

is not yet completed. When completed, it will be the largest Gothic cathedral in the world: 601 ft. long, 146 ft. wide at the nave, 320 ft. wide at the transept.

*St. Patrick's Cathedral*, at 5th Ave. and 50th St. in New York City, has a seating capacity of 4,500. The nave was opened in 1877; the cathedral was dedicated in 1879.

*Lincoln Memorial*, in Washington, D. C., was dedicated in 1922. It has 36 columns (the number of states in 1865), each 44 ft. high. The main chamber contains a statue of Lincoln.

*Independence Hall*, in Philadelphia, was the scene of the signing of the Declaration of Independence and the drawing up of the U. S. Constitution. It was built between 1732-41 as the State House. The Liberty Bell is on the first floor.

## Great Dams of the World

Reservoir capacity, thousands of acre feet	Name	Location	Maximum height, feet	Date completed
31,142	Hoover	Colorado River, Ariz.-Nev.	726	1936
24,600	Garrison	Missouri River, N. Dak.	210	*
19,600	Oahe	Missouri River, S. Dak.	230	*
19,412	Fort Peck	Missouri River, Mont.	250	1940
9,617	Grand Coulee	Columbia River, Wash.	550	1942
6,200	Fort Randall	Missouri River, S. Dak.	150	*
6,100	Kentucky	Tennessee River, Ky.	160	1944
6,089	Wolf Creek	Cumberland River, Ky.	242	1951
6,000	Hirakud	Mahandi River, India	180	*
5,825	Denison	Red River, Okla.-Tex.	165	1944
4,500	Shasta	Sacramento River, Calif.	602	1945
4,407	Gatun	Chagres River, Panama Canal Zone	115	1912
4,060	Aswan	Nile River, Egypt	174	1934
3,500	Hungry Horse	Flathead, S. Fk., Mont.	520	1953
3,263	Lázaro Cárdenas (El Palmito)	Nazas River, Mex.	295	1948
3,000	Salt Springs	North Fork, Mokelumne River, Calif.	345	1931
2,567	Norris	Clinch River, Tenn.	265	1936
2,432	Alvaro Obregón (Oviachic)	Yaqui River, Sonora, Mex.	187	1953
2,300	Saluda	Saluda River, S. C.	208	1930
2,219	Elephant Butte	Rio Grande, N. Mex.	301	1916
2,150	Mettur	Cauvery River, India	214	1934
2,092	Center Hill	Caney Fork River, Tenn.	240	1950
2,000	Hume	Murray River, Australia	180	1936
2,000	Kingsley	North Platte River, Nebr.	162	1941
1,997	Osage (Bagnell)	Osage River, Mo.	148	1931
1,983	Norfolk	North Fork River, Ark.	230	1944
1,980	Chelsea	Gatineau River, Canada	100	1927
1,975	Pensacola	Grand River, Okla.	152	1940
1,934	Marshall Ford (Mansfield)	Colorado River, Tex.	270	1941
1,820	Davis	Colorado River, Ariz.-Nev.	200	1949
1,706	Dale Hollow	Obey River, Tenn.-Ky.	183	1943
1,704	American Falls	Snake River, Idaho-Wyo.	92	1927
1,702	El Azucar	San Juan River, Mexico	142	1943
1,565	Cherokee	Holston River, Tenn.	212	1942
1,560	Sardis	Little Tallahatchie River, Miss.	117	1940
1,540	Douglas	French Broad River, Tenn.	160	1943
1,450	Fontana	Little Tennessee River, N. C.	470	1944
1,400	Roosevelt	Salt River, Ariz.	280	1911

\* Under construction in 1954.

## Notable Modern Bridges

Length of channel span, feet	Name	Location	Type*	Year completed
4,200	GOLDEN GATE	San Francisco	S	1937
3,500	GEORGE WASHINGTON	New York City	S	1931
2,800	TACOMA NARROWS	Tacoma, Wash.	S	1950
2,310	TRANSBAY	San Francisco	S	1936
2,300	BRONX-WHITESTONE	New York City	S	1939
2,150	DELAWARE MEMORIAL	Near Wilmington, Del.	S	1951
1,850	AMBASSADOR	Detroit, Mich.	S	1929
1,800	QUEBEC	Near Quebec, Canada	C	1917
1,750	DELAWARE RIVER	Philadelphia, Pa.	S	1926
1,700	FORTH	Firth of Forth, Scotland	C	1889
1,652	KILL VAN KULL	Bayonne, N. J.	SA	1931
1,650	SYDNEY HARBOR	Sydney, Australia	SA	1932
1,632	BEAR MOUNTAIN	Peekskill, N. Y.	S	1924
1,600	CHESAPEAKE BAY	Near Annapolis, Md.	S	1952
1,600	WILLIAMSBURG	New York City	S	1903
1,595.5	BROOKLYN	New York City	S	1883
1,550	LIONS GATE	Vancouver, Canada	S	1939
1,500	MID-HUDSON	Poughkeepsie, N. Y.	S	1930
1,500	HOWRAH	Calcutta, India	C	1943
1,470	MANHATTAN	New York City	S	1909
1,400	TRANSBAY	Oakland, Calif.	C	1936
1,380	TRIBOROUGH	New York City	S	1936
1,240	COLOGNE-RODENKIRCHEN	Germany	S	1954
1,207	ST. JOHNS	Portland, Oreg.	S	1931
1,200	LONGVIEW	Longview, Wash.	C	1930
1,200	MT. HOPE	Near Bristol, R. I.	S	1929
1,182	QUEENSBORO	New York City	C	1909
1,114	FLORIANÓPOLIS	Florianópolis, Brazil	S	1926
1,100	CARQUINEZ STRAIT	Near San Francisco	C	1927
1,097	MONTREAL HARBOR	Montreal, Canada	C	1930
1,080	BIRCHENOUGH	Southern Rhodesia	SA	1935
1,080	DEER ISLE	Deer Isle, Me.	S	1939
1,057	CINCINNATI	Cincinnati, Ohio	S	1867
1,050	OTTO BEIT	Southern Rhodesia	S	1939
1,050	COOPER RIVER	Charleston, S. C.	C	1929
1,034	COLOGNE-MÜLHEIM	Germany	S	1951
1,010	WHEELING	Wheeling, W. Va.	S	1849
977.5	HELL GATE	New York City	SA	1917
963	EAST ST. LOUIS	East St. Louis, Ill.	C	1950
950	RAINBOW	Niagara Falls, N. Y.	SA	1941
949	GRAND MERE	Quebec, Canada	S	1928
930	PEACE RIVER	Alaska Highway	S	1943
924	STORY	Queensland, Australia	C	1940
875	NATCHEZ	Natchez, Miss.	C	1940
871	BLUE WATER	Port Huron, Mich.	C	1938
866	SANDO	Sando, Sweden	CA	1943
845	DUBUQUE	Dubuque, Iowa	CT	1942
800	THOUSAND ISLANDS	Alexandria Bay, N. Y.	S	1938
800	WALDO-HANCOCK	Bucksport, Maine	S	1931
800	RIP VAN WINKLE	Catskill, N. Y.	C	1935
800	HENRY HUDSON	New York City	SA	1936
790	HUEY P. LONG	Near New Orleans, La.	C	1935

\* C—Cantilever. S—Suspension. SA—Steel Arch. CA—Concrete Arch. CT—Continuous Truss.

## Area and Population by Country

Country	Area, sq. mi.	Population	Year <sup>1</sup>	Country	Area, sq. mi.	Population	Year <sup>1</sup>
Afghanistan	270,000	13,000,000	1953E	Jordan	39,460 <sup>a</sup>	1,400,000 <sup>a</sup>	1951E
Albania	10,629	1,246,000	1952E	Korea	85,225	30,000,000	1951E
Argentina	1,079,965	18,379,000	1953E	Laos	91,428	1,214,000	1950E
Australia	2,974,581	8,917,763	1953E	Latvia <sup>4</sup>	25,395	2,100,000	1950E
Austria	32,388	6,918,959	1951C	Lebanon	3,475	1,330,000	1952E
Belgium	11,783	8,757,691	1952E	Liberia	40,000	1,500,000	1953E
Bhutan	18,000	300,000	..... E	Libya	679,340	1,124,000	1951E
Bolivia	416,040	3,089,000	1952E	Liechtenstein	65	13,757	1950C
Brazil	3,291,416	55,772,000	1953E	Lithuania <sup>4</sup>	22,958	3,000,000	1950E
Bulgaria	42,741	7,390,000	1952E	Luxemburg	1,010	304,000	1953E
Burma	261,749	19,045,000	1953E	Maldives Islands	115	93,000	..... E
Cambodia	53,668	3,296,000	1950E	Mexico	758,061	28,053,000	1953E
Canada	3,619,616	14,780,000	1953E	Monaco	0.59	20,000	1951E
Ceylon	25,332	8,103,648	1953C	Mongolian People's Rep.	580,158	900,000	1950E
Chile	286,323	5,930,809	1952C	Nepal	54,000	7,000,000	1952E
China <sup>3</sup>	3,858,900	475,000,000	1950E	Netherlands	12,514	10,550,737	1954E
Colombia	439,714	12,033,000	1953E	New Zealand	103,416	2,087,740	1954E
Costa Rica	19,238	893,000	1953E	Nicaragua	57,143	1,166,000	1953E
Cuba	44,217	5,814,112	1953C <sup>3</sup>	Norway	125,193	3,375,000	1953E
Czechoslovakia	49,330	12,339,674	1950C	Pakistan	364,737	75,635,496	1951C
Denmark	16,575	4,347,400	1953E	Panamá	28,575	887,400	1954E
Dominican Republic	19,327	2,290,800	1953E	Paraguay	154,165	1,464,000	1952E
Ecuador	104,510	3,350,000	1952E	Peru	482,133	9,035,000	1953E
Egypt	383,000	21,941,000	1953E	Philippines	114,400	21,440,200	1954E
El Salvador	13,176	2,088,431	1953E	Poland	119,703	26,200,000	1953E
Estonia <sup>4</sup>	18,357	1,126,415	1940E	Portugal	35,413	8,621,000	1953E
Ethiopia <sup>10</sup>	350,000	15,000,000	1951E	Rumania	91,654	16,300,000	1952E
Finland	130,160	4,168,000	1953E	San Marino	38	12,969	1951E
France	212,741	42,995,000	1954E	Saudi Arabia	597,000	6,000,000	1952E
Germany:				Spain	194,945	28,638,977	1953E
emocratic Republic	41,700	18,541,000	1953E	Sweden	173,341	7,192,316	1953E
Federal Republic	94,634	48,994,000	1953E	Switzerland	15,940	4,910,000	1953E
Greece <sup>6</sup>	51,182	7,865,000	1953E	Syria	73,587	3,433,784	1952E
Guatemala	45,452	3,048,000	1953E	Thailand	198,247	19,556,000	1953E
Haiti	10,748	3,315,000	1953E	Tibet	469,294	3,000,000	1948E
Honduras	59,145	1,557,000	1953E	Turkey	296,185	22,461,000	1953E
Hungary	35,893	9,460,000	1952E	Un. of So. Africa <sup>8</sup>	472,550	13,153,000	1953E
Iceland	39,709	151,300	1953E	U.S.S.R.	8,473,444	207,000,000	1952E
India	1,174,116 <sup>7</sup>	356,691,760 <sup>7</sup>	1951C	United Kingdom	93,371	50,592,000	1953E
Indonesia	583,479	78,389,000	1954E	United States	2,974,726	150,697,361	1950C
Iran	634,413	20,000,000	1951E	Uruguay	72,172	2,525,000	1953E
Iraq	116,600	5,100,000	1950E	Vatican City	108.7 <sup>a</sup>	947	1952E
Ireland	26,601	2,942,000	1953E	Venezuela	352,143	5,608,534	1953E
Israel	8,050	1,669,397	1953E	Viêt-Nam	127,259	23,073,000	1950E
Italy	116,235	47,041,000	1953E	Yemen	31,000	4,500,000	1953E
Japan	146,690	86,300,000	1953E	Yugoslavia	99,181	16,927,275	1953C <sup>2</sup>

<sup>1</sup> E—Estimated; C—Census. <sup>2</sup> Preliminary figure. <sup>3</sup> Including Formosa, Manchuria, Tibet; excluding Outer Mongolia. <sup>4</sup> Actually Russian S.S.R., but still recognized by U. S. as independent country. <sup>5</sup> Including Dodecanese. <sup>6</sup> Excluding South-West Africa. <sup>7</sup> Excluding Kashmir. <sup>8</sup> Acres. <sup>9</sup> Including Arab Palestine. <sup>10</sup> Excluding Eritrea.

## National Holidays of American Countries

Source: U. S. Department of State.

Argentina: Independence Day, July 9.  
 Bolivia: Independence Day, Aug. 6.  
 Brazil: Independence Day, Sept. 7.  
 Canada: Dominion Day, July 1.  
 Chile: Independence Day, Sept. 18.  
 Colombia: Independence Day, July 20.  
 Costa Rica: Independence Day, Sept. 15.  
 Cuba: Independence Day, May 20.  
 Dominican Republic: Independence Day,  
 Feb. 27.  
 Ecuador: Independence Day, Aug. 10.

El Salvador: Independence Day, Sept. 15.  
 Guatemala: Independence Day, Sept. 15.  
 Haiti: Independence Day, Jan. 1.  
 Honduras: Independence Day, Sept. 15.  
 Mexico: Independence Day, Sept. 16.  
 Nicaragua: Independence Day, Sept. 15.  
 Panamá: Independence Day, Nov. 3.  
 Paraguay: Independence Day, May 14.  
 Peru: Independence Day, July 28.  
 Uruguay: Independence Day, Aug. 25.  
 Venezuela: Independence Day, July 5.



## Largest Cities of the World

(Exact rating of the cities of the world according to size is impossible because of the diversity of the years for which census or estimated population figures have been issued. Therefore, the rating shown in this table must be considered only approximate.)

City and country	Population	Year*	City and country	Population	Year*
1. London (Greater), England.....	8,346,137	1951C	11. Paris, France.....	2,800,000	1948E
2. New York, N. Y., U.S.A.....	7,891,957	1950C	12. Jakarta, Indonesia.....	2,800,000	1951E
3. Shanghai, China.....	5,410,000	1952E	13. Calcutta, India.....	2,548,677	1951C
4. Tokyo, Japan.....	5,385,071	1950C	14. Rio de Janeiro, Brazil.....	2,413,152	1950C†
5. Moscow, U.S.S.R.....	4,137,018	1939C	15. Peking, China.....	2,240,000	1952E
6. Chicago, Ill., U.S.A.....	3,620,962	1950C	16. Mexico City, Mexico.....	2,234,795	1950C
7. Buenos Aires, Argentina.....	3,371,000	1950E	17. São Paulo, Brazil.....	2,227,512	1950C†
8. Berlin, Germany.....	3,307,894	1950C	18. Los Angeles, Calif., U.S.A.....	2,104,663	1953C†
9. Leningrad, U.S.S.R.....	3,191,304	1939C	19. Cairo, Egypt.....	2,100,506	1947C
10. Bombay, India.....	2,839,270	1951C	20. Philadelphia, Pa., U.S.A.....	2,071,605	1950C

## Other Large Foreign Cities (over 505,000)

City and country	Population	Year*	City and country	Population	Year*
Ahmedabad, India.....	788,333	1951C	Lisbon, Portugal.....	790,434	1950C
Alexandria, Egypt.....	925,081	1947C	Liverpool, England.....	789,532	1951C
Amsterdam, Netherlands.....	858,702	1954E	Lódz, Poland.....	619,914	1950C
Athens, Greece.....	559,250	1951C	Madras, India.....	1,416,056	1951C
Baku, U.S.S.R.....	809,347	1939C	Madrid, Spain.....	1,720,999	1953E
Bandung, Indonesia.....	659,213	1951E	Manchester, England.....	703,175	1951C
Bangalore, India.....	778,977	1951C†	Manila, Philippines.....	1,158,260	1952E
Bangkok, Thailand.....	827,290	1947C	Marseille, France.....	700,000	1948E
Barcelona, Spain.....	1,346,737	1953E	Melbourne, Australia.....	1,393,000	1952E
Birmingham, England.....	1,112,340	1951C	Milan, Italy.....	1,264,402	1951C
Bogotá, Colombia.....	643,187	1951C†	Montevideo, Uruguay.....	850,000	1948E
Brussels, Belgium.....	968,139	1952E	Montreal, Canada.....	1,021,520	1951C
Bucharest, Rumania.....	1,401,807	1948C	Mukden, Manchuria.....	1,790,000	1952E
Budapest, Hungary.....	1,058,288	1948C†	Munich, Germany.....	870,000	1953E
Canton, China.....	1,210,000	1952E	Nagoya, Japan.....	1,030,635	1950C
Capetown, South Africa.....	571,638	1951C	Nanking, China.....	1,020,000	1952E
Casablanca, Morocco.....	551,222	1947C	Naples, Italy.....	1,003,815	1951C
Chiang Mai, Thailand.....	534,623	1947C	Odessa, U.S.S.R.....	604,223	1937E
Chungking, China.....	2,000,000	1952E	Osaka, Japan.....	1,956,136	1950C
Cologne, Germany.....	629,200	1953E	Port Arthur, Kwantung.....	1,010,000	1952E
Copenhagen, Denmark.....	758,300	1954E	Prague, Czechoslovakia.....	932,024	1948E
Dairen, Kwantung.....	533,696	.....	Rangoon, Burma.....	600,000	1952E
Delhi, India.....	914,973	1951C	Recife, Brazil.....	534,468	1950C†
Dresden, Germany.....	510,100	1953E	Rome, Italy.....	1,606,739	1951C
Dublin, Ireland.....	522,183	1951C	Rostov on Don, U.S.S.R.....	510,253	1939C
Essen, Germany.....	624,100	1953E	Rotterdam, Netherlands.....	704,646	1954E
Frankfurt am Main, Germany.....	564,400	1953E	Santiago, Chile.....	1,348,283	1952C
Genoa, Italy.....	678,200	1951C	Seoul, Korea.....	1,446,049	1949E
Glasgow, Scotland.....	1,089,555	1951C	Sheffield, England.....	512,834	1951C
Gorki, U.S.S.R.....	644,116	1939C	Sian, China.....	628,499	1948C
Hague, The, Netherlands.....	590,755	1954E	Stockholm, Sweden.....	769,714	1953E
Hamburg, Germany.....	1,658,000	1953E	Surabaya, Indonesia.....	714,898	1951E
Harbin, Manchuria.....	1,000,000	1952E	Sydney, Australia.....	1,621,040	1952E
Havana, Cuba.....	783,162	1953C†	Taipei, Formosa.....	540,971	.....
Hyderabad, India.....	1,085,722	1951C	Tashkent, U.S.S.R.....	585,005	1939C
Istanbul, Turkey.....	1,018,468	1950C	Teheran, Iran.....	850,000	1948E
Johannesburg, U. of So. Af.....	880,014	1951C	Tientsin, China.....	2,010,000	1952E
Jokjakarta, Indonesia.....	1,848,886	1951E	Tiflis, U.S.S.R.....	519,175	1939C
Kanpur, India.....	705,383	1951C	Toronto, Canada.....	675,754	1951C
Karachi, Pakistan.....	1,006,416	1951C	Tsingtao, China.....	850,308	1948E
Kharkov, U.S.S.R.....	833,432	1939C	Turin, Italy.....	711,492	1951C
Kiev, U.S.S.R.....	846,293	1939C	Valencia, Spain.....	527,999	1953E
Kobe, Japan.....	765,435	1950C	Victoria, Hong Kong.....	767,000	.....
Kyoto, Japan.....	1,101,854	1950C	Vienna, Austria.....	1,760,784	1951C
Lahore, Pakistan.....	849,000	1951C	Warsaw, Poland.....	650,064	1950C
Leipzig, Germany.....	607,700	1953E	Wuhan, China.....	1,090,000	1952E
Lima, Peru.....	926,400	1952E	Yokohama, Japan.....	951,189	1950C

\* E—Estimated; C—Census. † Preliminary figures. ‡ Special census conducted under direction of U. S. Bureau of Census, at city expense.

## Great Disasters

### Earthquakes and Volcanic Eruptions

- A.D. 79** Aug. 24, ITALY: eruption of Mt. Vesuvius buried cities of Pompeii and Herculaneum, killing thousands of persons.
- 1755** Nov. 1, PORTUGAL: one of the most severe of recorded earthquakes leveled Lisbon and was felt as far away as southern France and North Africa; between 10,000 and 20,000 killed in Lisbon alone.
- 1883** Aug. 26-28, NETHERLANDS INDIES: eruption of Krakatoa; violent explosions destroyed two-thirds of island. Sea waves occurred as far away as Cape Horn, and possibly England. Estimated 36,000 dead.
- 1902** May 8, MARTINIQUE, WEST INDIES: Mt. Pelée erupted and wiped out city of St. Pierre; 40,000 dead.
- 1906** April 18, SAN FRANCISCO: earthquake accompanied by fire razed more than 4 sq. mi.; more than 500 dead or missing; property damage about 250-300 millions.
- 1908** Dec. 28, MESSINA, SICILY: about 85,000 killed and city totally destroyed by one of most disastrous of recorded earthquakes.
- 1923** Sept. 1, JAPAN: earthquake destroyed third of Tokyo and most of Yokohama; more than 90,000 persons were killed.
- 1935** May 31, INDIA: earthquake at Quetta killed an estimated 50,000.
- 1939** Jan. 24, CHILE: earthquake razed some 50,000 sq. mi.; 30,000 killed.
- 1939** Dec. 27, NORTHERN TURKEY: severe quakes destroyed city of Erzingan; about 100,000 casualties.
- 1949** Aug. 5, ECUADOR: earthquake killed about 6,000 and razed 50 towns.
- 1950** Aug. 15, INDIA: second heaviest earthquake on record affected 30,000 sq. mi. in Assam; 20,000-30,000 believed killed.
- 1951** Jan. 18-21, PAPUA TERRITORY, NEW GUINEA: eruption of Mt. Lamington killed more than 3,000.
- 1953** Aug. 9-12, GREEK IONIAN ISLANDS: series of earthquakes killed at least 600, caused much damage.

### Floods, Avalanches and Tidal Waves

#### WORLD

- 1228** HOLLAND: 100,000 reputedly drowned by sea flood in Friesland section.
- 1642** CHINA: rebels besieging Kaifeng destroyed seawall, causing flood that drowned 300,000 inhabitants.
- 1887** CHINA: hundreds of thousands of lives reputedly lost in Honan province in overflow of Hwang Ho River.
- 1896** JAPAN: earthquake and tidal wave at Sanriku killed 27,000.
- 1939** CHINA: floods in north; casualties estimated at 10,000,000 homeless, starved or drowned.
- 1946** ALASKA-HAWAII: series of tidal waves in Pacific originating off Alaska killed about 150 in Hawaii.
- 1947** JAPAN: floods in wake of typhoon killed about 2,000 on Honshu Island.
- 1948** TURKEY: hundreds of persons were drowned when two rivers in southern Turkey burst their dikes.
- 1948** CHINA: about 1,000 reported dead in floods near Foochow.
- 1950** CHINA: floods in eastern and southern China left 1,000,000 homeless and killed 500.
- 1951** ALPS: snow avalanches killed more than 200 in Alpine regions of Switzerland, Italy, France and Austria.
- 1951** MANCHURIA: floods killed 1,800; 3,000 missing.
- 1951** ITALY: Po river floods killed about 150 and left 150,000 homeless.
- 1953** NORTHWEST EUROPE: storm followed by floods devastated North Sea coastal areas of Britain, Netherlands, Belgium, France, Germany. Netherlands was hardest hit, with 1,794 dead and many missing.
- 1953** JAPAN: separate floods on Kyushu and Honshu islands reported to have killed about 1,300.
- 1954** ALPS: about 150 died in snow avalanches.

#### UNITED STATES

- 1889** PENNSYLVANIA: more than 2,000 died in Johnstown flood.
- 1913** OHIO AND INDIANA: floods of Ohio and Indiana rivers took 730 lives.
- 1927** MISSISSIPPI VALLEY: floods inundated 20,000 sq. mi.; 700,000 were left homeless.
- 1937** MISSISSIPPI AND TRIBUTARY VALLEYS: floods in the Allegheny, Mississippi, Ohio valleys killed hundreds.
- 1954** TEXAS-MEXICO BORDER: flood of Rio Grande river killed 50 or more.

## Tornadoes, Typhoons and Hurricanes

## WORLD

- 1864 Oct. 5, INDIA: most of Calcutta denuded by cyclone; 70,000 persons were killed.
- 1876 Oct. 31, INDIA: cyclone and tidal wave swept 3,000 sq. mi. with Bengal worst hit; 215,000 killed.
- 1882 June 6, INDIA: cyclone and tidal wave killed 100,000 in Bombay.
- 1906 CHINA: typhoon at Hong Kong killed about 10,000.
- 1930 Sept. 3, SANTO DOMINGO (now Ciudad Trujillo): hurricane killed about 2,000 and injured 6,000.
- 1934 Sept. 21, JAPAN: hurricane killed more than 4,000 on Honshu.
- 1935 Oct. 25, HAITI: hurricane, flood killed 2,000 in Jérémie and Jacmel.
- 1942 Oct. 16, INDIA: cyclone devastated Bengal; about 40,000 lives lost.
- 1949 Oct. 27, INDIA: cyclone along southeastern coast killed about 1,000.
- 1949 Oct. 31-Nov. 2, PHILIPPINES: 1,000 believed dead following typhoon.
- 1952 Oct. 20-22, INDO-CHINA, PHILIPPINES: typhoons killed more than 1,000.
- 1953 Sept. 25, VIET-NAM: typhoon left about 1,000 dead.

## UNITED STATES

- 1884 Feb. 18, SOUTHERN STATES: tornadoes took about 700 lives.
- 1900 Sept. 8, TEXAS: Galveston hurricane and tidal wave; 5,000 dead.
- 1925 March 18, MIDWEST: about 800 killed and 13,000 injured in tornado which hit Ill., Ind., Tenn., Ky., and Mo.
- 1926 Sept. 18, FLORIDA: east coast hurricane killed 373; 40,000 homeless.
- 1928 Sept. 12, FLORIDA: hurricane from Windward Islands killed 4,000.
- 1936 April 2, MISSISSIPPI AND GEORGIA: Tupelo, Miss., and Gainesville, Ga., centers of tornadoes which swept South; 402 killed, 1,853 injured.
- 1938 Sept. 21, NEW ENGLAND: hurricane killed at least 488 in severest recorded storm of northeastern states.
- 1952 March 21-22, SOUTHWEST: tornadoes and floods killed almost 250.
- 1953 May 11, TEXAS: tornado killed 114 and injured more than 500 in Waco.
- 1953 June 8, MICHIGAN AND OHIO: series of tornadoes killed 113 in Flint, Mich., and 19 in vicinity of Bowling Green, Ohio.
- 1954 Aug. 31, NORTHEAST U. S.: at least 45 dead in hurricane.

## Fires and Explosions

## WORLD

- 1666 Sept. 2, ENGLAND: "Great Fire of London" destroyed 13,200 houses, St. Paul's Church, 86 parish churches, etc. Damage 10 million pounds.
- 1812 Sept. 14, RUSSIA: fire started by Russians in Moscow after French occupation destroyed 30,800 houses.
- 1881 Dec. 8, AUSTRIA: about 850 died in Ring Theater fire in Vienna.
- 1917 Dec. 6, CANADA: explosion and fire at Halifax when ammunition ship collided with a vessel; 1,500 dead.
- 1922 ASIA MINOR: more than three-fifths of Smyrna destroyed by fire following Turkish occupation.
- 1948 July 28, GERMANY: explosion in I. G. Farben Ludwigshaven works killed hundreds, injured 6,000.
- 1949 Sept. 2, CHINA: Fire on Chunking waterfront killed 1,700 and gutted 10,000 buildings.
- 250 persons, and made 98,500 homeless; 196 million damage.
- 1872 Nov. 9, BOSTON: fire destroyed 800 buildings; 75 million damage.
- 1904 Feb. 7, BALTIMORE, MD.: Fire destroyed most of business section; 125 million damage.
- 1937 March 18, NEW LONDON, TEXAS: explosion destroyed schoolhouse; 413 children and 14 teachers killed.
- 1942 Nov. 28, BOSTON: Coconut Grove night club fire killed about 500.
- 1944 July 17, PORT CHICAGO, CALIF.: more than 300 killed in explosion of two ammunition ships.
- 1946 Dec. 7, ATLANTA: Fire in Winecoff Hotel killed 119.
- 1947 March 25, CENTRALIA, ILL.: explosion in coal mine killed 111 miners.
- 1947 April 16-18, TEXAS CITY, TEXAS: most of city destroyed, more than 500 persons dead following explosion on ship.

## UNITED STATES

- 1835 Dec. 16, NEW YORK CITY: 530 buildings destroyed by fire.
- 1871 Oct. 8, CHICAGO: the "Chicago Fire," which started in barn, swept 2,124 acres, burned 17,450 buildings, killed
- 1951 Dec. 21, near WEST FRANKFORT, ILL.: 119 coal miners died in explosion.
- 1953 Oct. 16, BOSTON, MASS.: explosion and fire aboard U. S. aircraft carrier *Leyte* killed 37.



## Shipwrecks (not including military or naval action)

## WORLD

- 1833 May 11, **LADY OF THE LAKE**: bound from England to Quebec, struck iceberg; 215 perished.
- 1853 Sept. 29, **ANNIE JANE**: emigrant vessel off coast of Scotland; 348 persons died.
- 1912 March 5, **PRINCIPE DE ASTURIAS**: Spanish steamer struck rock off Sebastien Pt.; 500 drowned.
- 1912 April 15, **TITANIC**: sank after colliding with iceberg; 1,513 died.
- 1914 May 29, **EMPRESS OF IRELAND**: sank after collision in St. Lawrence River; 1,024 perished.
- 1928 Nov. 12, **VESTRIS**: British steamer sank in gale off Virginia; 110 died.
- 1931 June 14, French excursion steamer overturned in gale off St. Nazaire; approximately 450 died.
- 1939 June 1, Submarine **THETIS**: sank in Liverpool Bay, Eng.; 99 perished.
- 1942 Oct. 2, **QUEEN MARY**: rammed and sank a British cruiser; 338 aboard the cruiser died.
- 1948 Dec. 3, **KIANGYA**: Chinese refugee ship wrecked in explosion; about 1,000 believed dead.
- 1949 Jan. 27, **TAIPING**: Chinese liner collided with collier and both sank; at least 600 died.
- 1949 Sept. 17, **NORONIC**: Canadian Great Lakes cruise ship burned at Toronto dock; about 130 died.
- 1950 Jan. 12, **TRUCULENT**: British submarine sank in Thames estuary after collision with tanker; 64 dead.
- 1951 April 16, **AFFRAY**: British submarine sank in English channel; 75 dead.
- 1953 Jan. 9, **CHANG TYONG-HO**: South Korean ferry foundered off Pusan; 249 reported dead.
- 1953 Jan. 31, **PRINCESS VICTORIA**: British ferry sank in Irish Sea; 133 reported lost.
- 1953 April 4, **DUMLUPINAR**: Turkish submarine sank in Dardanelles after collision with Swedish freighter; 81 lost.
- 1953 Aug. 1, **MONIQUE**: French motor ship with 120 aboard disappeared in South Pacific.

## U. S. AND U. S. LINES

- 1865 April 27, **SULTANA**: boiler explosion on Mississippi River steamboat near Memphis; 1,450 killed.
- 1904 June 15, **GENERAL SLOCUM**: excursion steamer burned in New York Harbor; 1,021 perished.
- 1915 July 24, **EASTLAND**: Great Lakes excursion steamer overturned in Chicago River; 812 died.
- 1934 Sept. 8, **MORRO CASTLE**: about 130 killed in fire occurring off Asbury Park, N. J.
- 1939 May 23, Submarine **SQUALUS**: sank with 59 men off Hampton Beach, N. H.; 33 members of the crew were rescued.
- 1945 April 9, U. S. ship, loaded with aerial bombs, exploded at Bari, Italy; at least 360 killed.
- 1952 Jan. 10, **FLYING ENTERPRISE**: freighter sank about 35 miles off southwest England after valiant 12-day effort by captain, Henrik K. Carlsen, to save ship.
- 1952 April 26, **HOBSON**: minesweeper collided with aircraft carrier *Wasp* and sank during night maneuvers in mid-Atlantic; 176 persons were reported lost.
- 1954 Jan. 21, off **INCHON**, KOREA: 29 U. S. Marines drowned when landing craft collided with Korean troopship.

## Aircraft Accidents

## WORLD

- 1921 Aug. 24, **ENGLAND**: **ZR-2**, British dirigible, broke in two on trial trip near Hull; 62 died.
- 1930 Oct. 5, **FRANCE**: British dirigible, *R-101*, crashed at Beauvais; 47 died.
- 1935 May 18, **U.S.S.R.**: stunt flier crashed into giant land plane, the *Maxim Gorky*; 49 killed.
- 1938 July 24, **COLOMBIA**: military plane crashed into grandstand during air review at Bogotá, killing 53.
- 1947 Feb. 15, **COLOMBIA**: Avianca airliner crashed near Bogotá; 53 killed.
- 1948 Aug. 1, **ATLANTIC OCEAN**: French flying boat with 52 persons aboard disappeared.
- 1949 July 12, near **BOMBAY, INDIA**: crash of Dutch airliner killed 13 U. S. journalists and 32 others.
- 1950 March 12, near **CARDIFF, WALES**: crash of chartered airliner killed 80.
- 1950 Nov. 13, near **GRENOBLE, FRANCE**: Canadian plane carrying Holy Year pilgrims crashed; 58 dead.
- 1952 March 22, near **FRANKFURT, GERMANY**: crash of Dutch airliner killed 45 of 47 aboard.

- 1953 May 2, near CALCUTTA, INDIA: British jet airliner crashed, killing 43.
- 1953 Sept. 1, near BARCELONNETTE, FRANCE: French airliner hit mountain; 42 dead.
- 1953 Oct. 14, near FRANKFURT AM MAIN, GERMANY: Belgian airliner crash killed 44.
- U. S. AND U. S. LINES
- 1925 Sept. 3, CALDWELL, OHIO: U. S. dirigible *Shenandoah* broke apart, killing 14.
- 1933 April 4, NEW JERSEY COAST: U. S. dirigible *Akron* crashed into sea; 73 died.
- 1937 May 6, LAKEHURST, N. J.: German zeppelin *Hindenburg* destroyed by fire at tower mooring; 36 persons were killed.
- 1946 Oct. 3, NEWFOUNDLAND: U. S. transatlantic airliner crashed near Stephenville; all 39 aboard killed.
- 1947 May 29, NEW YORK CITY: airliner crashed attempting takeoff; 43 died.
- 1947 May 30, BAINBRIDGE, MD.: all 49 passengers and four crew members killed in crash of airliner.
- 1947 June 13, near LEESBURG, VA.: Fifty killed in crash of airliner.
- 1947 Oct. 24, BRYCE CANYON, UTAH: airliner crashed into hillside after catching fire in midair; 52 persons were killed.
- 1948 June 17, near MOUNT CARMEL, PA.: all 43 persons aboard airliner were killed as it crashed and burned.
- 1948 Aug. 29, near WINONA, MINN.: all 36 aboard airliner killed when it crashed into bluff.
- 1949 June 7, near SAN JUAN, PUERTO RICO: crash of converted army transport into ocean killed 53; 28 rescued.
- 1949 July 12, near LOS ANGELES, CALIF.: nonscheduled airliner hit mountain, killing 35 persons and injuring 14.
- 1949 Nov. 1, WASH., D. C.: fighter plane rammed airliner, killing 55.
- 1950 Jan. 27, YUKON, CANADA: U. S. Air Force plane disappeared with 44 aboard.
- 1950 June 24, near ST. JOSEPH, MICH.: airliner disappeared over Lake Michigan, presumably after exploding; 58 dead.
- 1950 Aug. 31, near CAIRO, EGYPT: crash of U. S. airliner killed 55, including 23 Americans.
- 1951 March 23, ATLANTIC OCEAN: U. S. Air Force transport with 53 aboard disappeared.
- 1951 April 25, near KEY WEST, FLA.: Cuban airliner and U. S. Navy plane collided; 43 killed.
- 1951 June 22, near SANOYE, LIBERIA: 40 persons aboard U. S. airliner died in crash.
- 1951 June 30, ROCKY MOUNTAIN NATIONAL PARK, COLO.: airliner crash killed 50 persons.
- 1951 Aug. 24, near DECOTO, CALIF.: transcontinental airliner crash killed 50 persons.
- 1951 Dec. 16, ELIZABETH, N. J.: nonscheduled airliner crash killed 56.
- 1952 Jan. 19, near SANDSPIT AIRPORT, B. C., CANADA: U. S. airlift plane with Korean veterans aboard fell into Pacific; 36 persons were killed, 7 survived.
- 1952 Jan. 22, ELIZABETH, N. J.: 29 killed, including former Sec. of War Robert P. Patterson, when airliner hit apartments; 7 of victims were on ground.
- 1952 Feb. 11, ELIZABETH, N. J.: third major air disaster in Elizabeth within 2 months fatally injured 33.
- 1952 April 11, near SAN JUAN, PUERTO RICO: airliner crashed into sea; 52 killed, 17 rescued.
- 1952 April 29, NORTH CENTRAL BRAZIL: airliner bound for New York crashed in jungle; 50 died.
- 1952 Nov. 14, near SEOUL, KOREA: crash of "Flying Boxcar" killed 44, including servicemen.
- 1952 Nov. 23, near ANCHORAGE, ALASKA: Air Force transport crashed, killing 52.
- 1952 Dec. 20, MOSES LAKE, WASHINGTON: crash of Air Force "Globemaster" killed 87 servicemen, injured 28.
- 1953 Jan. 7, near FISH HAVEN, IDAHO: Army transport plane crash killed 40 persons.
- 1953 Feb. 14, GULF OF MEXICO: airliner crash off Mobile, Ala., during storm killed 46.
- 1953 June 18, near TOKYO, JAPAN: crash of U. S. Air Force "Globemaster" killed 129 servicemen in world's worst air disaster to date.
- 1953 July 11, PACIFIC OCEAN: airliner crashed into ocean about 325 mi. east of Wake Island; 58 persons were killed.
- 1953 July 18, near MILTON, FLA.: U. S. Marine plane crash killed 44.
- 1954 Jan. 31, off HOKKAIDO ISLAND, JAPAN: 35 U. S. servicemen killed in crash of air force plane.

## Railroad Accidents

### WORLD

- 1857 March 17, DES JARDINES CANAL, CANADA: train derailed on bridge; about 60 killed.
- 1864 June 29, near BELOEIL, CANADA: about 90 killed when train ran through open switch.
- 1879 Dec. 28, DUNDEE, SCOTLAND: train blown off Tay bridge; 73 drowned.
- 1881 June 24, near CUARTLA, MEXICO: about 200 died when train fell into river.
- 1882 July 13, near TCHERNY, RUSSIA: more than 150 killed in derailment.
- 1889 June 12, near ARMAGH, IRELAND: about 80 killed in collision.
- 1891 June 14, near BASEL, SWITZERLAND: about 100 killed in collision.
- 1915 May 22, GRETNA, SCOTLAND: two passenger trains and troop train collided; 227 killed.
- 1938 Dec. 25, near KISHINEV, RUMANIA: about 100 killed in collision.
- 1939 Dec. 22, near MAGDEBURG, GERMANY: more than 125 killed in collision; 99 killed in another wreck near Friedrichshafen.
- 1940 Jan. 29, OSAKA, JAPAN: 200 killed in collision.
- 1944 March 2, near SALERNO, ITALY: 521 suffocated when Italian train stalled in tunnel.
- 1949 Oct. 22, near NOWY DWOR, POLAND: more than 200 reported killed in derailment of Danzig-Warsaw express.
- 1950 April 6, near RIO DE JANEIRO, BRAZIL: train wrecked when bridge collapsed; 108 killed or missing.
- 1951 April 24, YOKOHAMA, JAPAN: fire aboard express train killed 104.
- 1952 March 4, near RIO DE JANEIRO, BRAZIL: about 120 reported killed in collision of 2 trains.
- 1952 Oct. 8, HARROW-WEALDSTONE, ENGLAND: two express trains crashed into commuter train; 112 dead.

- 1953 Dec. 24, near WAIOURI, NEW ZEALAND: train plunged through bridge; 155 dead and others missing.
- 1953 Dec. 24, near SAKVICE, CZECHOSLOVAKIA: crash of two trains reported to have killed 103.
- 1954 Jan. 21, SIND DESERT, PAKISTAN: collision of two trains killed 100.

### UNITED STATES

- 1856 July 17, near PHILADELPHIA, PA.: train carrying Sunday-school children wrecked; 66 killed.
- 1876 Dec. 29, ASHTABULA, O.: 80 killed when train broke through bridge.
- 1887 Aug. 10, near CHATSWORTH, ILL.: about 80 killed in wreck.
- 1904 Aug. 7, near EDEN, COLO.: about 100 killed in wreck.
- 1910 March 1, WELLINGTON, WASH.: more than 90 killed.
- 1938 June 19, MILES CITY, MONT.: train ran through bridge; 47 killed.
- 1943 Sept. 6, PHILADELPHIA, PA.: train derailed; 79 killed.
- 1943 Dec. 16, near RENNERT, N. C.: 72 killed in derailment and collision.
- 1944 Dec. 31, near OGDEN, UTAH: 48 killed in collision.
- 1946 April 25, NAPERVILLE, ILL.: at least 47 killed in collision.
- 1950 Feb. 17, ROCKVILLE CENTRE, N. Y.: head-on crash of two commuter trains killed 30.
- 1950 Sept. 11, near WEST LAFAYETTE, O.: streamliner rammed rear of troop train. 33 National Guardsmen dead.
- 1950 Nov. 22, RICHMOND HILL, N. Y.: 79 died when one commuter train crashed into rear of another.
- 1951 Feb. 6, WOODBRIDGE, N. J.: 85 died when commuter train plunged through temporary overpass.

## America's Tallest Buildings

City	Building	No. of stories	Height, feet
New York	Empire State	102	1,250
New York	Chrysler	77	1,046
New York	60 Wall Tower	66	950
New York	Bk. of Manhattan	71	925
New York	R. C. A.	70	850
New York	Woolworth	60	792
New York	City Bank	54	745
Cleveland	Terminal Tower	52	708
New York	500 Fifth Avenue	60	700
New York	Metropolitan Life	50	700
New York	Chanin	56	680
New York	Lincoln	53	673
New York	Irving Trust	50	654
New York	General Electric	50	641
New York	Waldorf-Astoria	47	525

City	Building	No. of stories	Height, feet
New York	10 E. 40th St.	48	621
New York	New York Life	40	617
New York	Singer	47	612
Chicago	Board of Trade	44	605
New York	U. S. Court House	37	590
Pittsburgh	Gulf	44	582
New York	Municipal	40	580
Cincinnati	Carew Tower	48	574
New York	Continental Bank	48	565
New York	Sherry-Netherland	40	560
New York	N. Y. Central	35	560
Chicago	Pittsfield	39	557
Columbus	Lincoln-LeVeque Tower	46	556
Chicago	Sheraton	42	555
Detroit	Penobscot	47	551



## Record Passages of Atlantic (Screw) Steamships since 1867

Source: Maritime Administration.

## WESTWARD PASSAGES

## EASTWARD PASSAGES

Date	Ship and (flag*)	To New York from	Time D. H. M.	Speed knots	Sea miles	Date	Ship and (flag*)	From New York to	Time D. H. M.	Speed knots	Sea miles
1867	CITY OF PARIS (B) (Time record only)	Queensdown	8 4 1	.....	.....	1869	CITY OF BRUSSELS† (B)	Queensdown	7 22 3	14.65	.....
1872	ADRIATIC (B)	"	7 23 17	14.52	.....	1873	BALTIC† (B)	"	7 20 9	15.11	.....
1875	CITY OF BERLIN† (B)	"	7 18 2	15.2	.....	1875	CITY OF BERLIN† (B)	"	7 15 28	15.37	.....
1875	GERMANIC (B)	"	7 11 37	15.75	.....	1876	GERMANIC† (B)	"	7 15 17	15.78	.....
1877	BRITANNIC (B)	"	7 10 53	15.46	.....	1876	BRITANNIC† (B)	"	7 12 41	15.95	.....
1877	BRITANNIC (B)	"	7 10 53	15.46	.....	1879	ARIZONA† (B)	"	7 8 0	15.95	.....
1882	ALASKA† (B)	"	6 21 40	16.04	.....	1882	ALASKA† (B)	"	6 18 37	16.88	.....
1883	OREGON† (Guion) (B)	"	6 10 9	18.16	.....	1884	OREGON (Guion) (B)	"	6 16 57	.....	.....
1884	OREGON (Cunard) (B)	"	6 9 42	18.16	.....	1884	AMERICA (B)	"	6 14 8	17.8	.....
1884	UMBRIA (B)	"	6 4 34	18.91	.....	1884	OREGON† (Cunard) (B)	"	6 10 40	18.18	.....
1887	ETRURIA† (B)	"	6 1 44	19.57	.....	1888	ETRURIA† (B)	"	6 4 54	19.41	.....
1888	CITY OF PARIS† (B)	"	5 14 24	20.1	.....	1888	UMBRIA (B)	"	6 3 12	.....	.....
1889	TEUTONIC† (B)	"	5 16 31	20.35	.....	1889	CITY OF PARIS† (B)	"	5 22 50	19.49	.....
1890	MAJESTIC† (B)	"	5 18 8	20.11	.....	1891	TEUTONIC (B)	"	5 21 3	19.78	.....
1891	CAMPANIA (B)	"	5 9 6	21.82	.....	1892	CITY OF NEW YORK (B)	"	5 19 57	20.1	.....
1891	LUCANIA† (B)	"	5 7 23	22.07	.....	1894	LUCANIA† (B)	"	5 8 38	.....	.....
1892	KAISER WILHELM DER GROSSE† (G)	Southampton	5 15 20	22.29	.....	1897	KAISER WILHELM DER GROSSE† (G)	Southampton	5 15 25	22.51	.....
1893	DEUTSCHLAND (G)	"	5 11 54	23.15	3,044	1898	DEUTSCHLAND† (G)	Eddystone Lt.	5 7 38	23.51	3,082
1900	LUSITANIA† (B)	Queensdown	4 11 40	24.00	.....	1901	KAISER WILHELM II† (G)	Plymouth	5 8 16	23.58	.....
1901	MAURETANIA† (B)	"	4 10 41	26.06	.....	1904	LUSITANIA† (B)	Queensdown	4 15 50	25.57	.....
1907	BREMEN† (G)	Cherbourg	4 21 44	26.9	3,162	1907	MAURETANIA† (B)	"	4 13 41	25.89	.....
1909	EUROPAT (G)	"	4 17 42	27.83	.....	1911	" (B)	Cherbourg	5 1 49	26.25	3,198
1910	REX† (I)	Gibraltar	4 17 6	27.91	3,157	1924	" (B)	Plymouth	4 17 50	27.22	3,098
1911	NORMANDIE† (F)	Bishop's Rock	4 13 58	28.92	3,181	1929	BREMEN† (G)	Cherbourg	4 14 30	27.91	3,084
1913	QUEEN MARY† (B)	"	4 3 2	29.98	3,015	1933	NORMANDIE† (F)	"	4 17 43	28.14	.....
1916	UNITED STATES† (US)	Bishop's Rock	3 21 12	34.51	2,906	1933	QUEEN MARY† (B)	Bishop's Rock	4 16 15	28.51	3,199
1918	UNITED STATES† (US)	Bishop's Rock	3 12 17	34.51	2,906	1936	NORMANDIE† (F)	"	4 3 25	30.35	.....
1929	UNITED STATES† (US)	Bishop's Rock	3 12 17	34.51	2,906	1936	QUEEN MARY† (B)	"	4 3 57	30.63	2,978
1936	UNITED STATES† (US)	Bishop's Rock	3 12 17	34.51	2,906	1938	UNITED STATES† (US)	Bishop's Rock	3 20 42	31.69	2,938
1952	UNITED STATES† (US)	Bishop's Rock	3 12 17	34.51	2,906	1952	UNITED STATES† (US)	Bishop's Rock	3 10 40	35.59	3,144

\* (B)—British; (G)—German; (I)—Italian; (F)—French. †Vessels which have held the Blue Ribband.

# HISTORICAL AND NEWS EVENTS

FROM ANCIENT TO MODERN TIMES

*Compiled by*

ENCYCLOPAEDIA BRITANNICA

(See also our section entitled *Headline History of Our Times*)

- Actium, Battle of** (31 B.C.). Octavius defeats Mark Anthony.
- Alexander the Great** conquers Greece, Persia, Egypt and part of India (334-330 B.C.). Major battles: Granicus (334 B.C.), Issus (333), Arbela (331).
- American Revolution** (1775-83). Outstanding events: 1775—Battle of Lexington-Concord (Apr. 19). Battle of Bunker Hill (June 17). 1776—Battle of Long Island (Aug. 27). 1777—Burgoyne surrenders at Saratoga (Oct. 17). 1781—Battle of Cowpens (Jan. 17). Battle of Yorktown (Sept. 28-Oct. 19), and British surrender by Cornwallis. 1783—Treaty signed by U. S. and Britain (Sept. 3).
- "Babylonian Captivity"** of Papacy with seat at Avignon (1309-77).
- Bacon's Rebellion** (May 10-Oct. 18, 1676). Nathaniel Bacon leads unsuccessful insurrection in Virginia because of abuses in government administration and taxation.
- Balfour Declaration** (Nov. 2, 1917) promises Jewish homeland in Palestine.
- Balkan Wars** (1912-13). Bulgaria, Serbia, Greece and Montenegro defeat Turkey; later, Bulgaria attacks Serbia and Greece and is defeated.
- Bastille destroyed** (July 14, 1789).
- Benedictine Order** founded at Monte Cassino (c. A.D. 529).
- Bible** translated by Wycliffe into English (1382-84); Douay Version published (1582 & 1609-10); King James Version published (1611).
- Black Death** (beginning c. 1347) wipes out at least  $\frac{1}{4}$  of the population of Europe.
- Black Friday** (Sept. 24, 1869). Financial panic results from gold corner in U. S.
- Boer War** (1899-1902). Boers defeated by British; sign peace treaty at Pretoria (May 31, 1902).
- Boston Massacre** (Mar. 5, 1770). British soldiers fire on Boston mob, killing 3.
- Boston Tea Party** (Dec. 16, 1773). Colonials dump tea in Boston Harbor because of tea tax.
- Boxer Rebellion** (1900). Uprising by secret society in northern China against foreigners.
- Brown, John, and 18 followers** raid Harpers Ferry (Oct. 16, 1859) and seize arsenal; taken prisoners by U. S. Marines (Oct. 18); Brown hanged (Dec. 2).
- Burr-Hamilton duel.** See Hamilton.
- Cape-to-Cairo Railroad** completed (1918).
- Carthage** founded by Phoenicians (c. 900 B.C.); destroyed by Romans (146 B.C.).
- Châlons, Battle of** (A.D. 451). Attila the Hun defeated by Romans.
- Charlemagne** crowned Emperor of the West (A.D. 800).
- Charles I** beheaded (Jan. 30, 1649). See also Great Rebellion.
- Children's Crusade** (1212). About 50,000 unarmed children set out to recover Holy Sepulchre; all lost or die on the way.
- Chinese-Japanese War** (1894-95). Japan wins Formosa, Pescadores and part of southern Manchuria; Korea becomes independent (annexed by Japan 1910).
- Christianity** made official religion of Roman Empire (A.D. 330).
- Civil War, American** (1861-65). Outstanding events: 1861—First Battle of Bull Run (July 21). 1862—*Monitor* defeats *Merrimac* (Mar. 9). Battle of Antietam (Sept. 15-17). 1863—Lincoln's Emancipation Proclamation (Jan. 1). Battle of Gettysburg (July 1-3). Grant captures Vicksburg (July 4). Battle of Lookout Mountain (Nov. 23-25). 1864—Battle of the Wilderness (May 5-6). Sherman's March through Georgia (Nov. 14-Dec. 22). 1865—Lee surrenders at Appomattox (Apr. 9).
- Code Napoléon**, unified codification of French law, adopted (1804).
- Code of Hammurabi** (c. 2300 B.C.). Oldest existing written code of laws.
- Communist Manifesto** issued by Karl Marx and Friedrich Engels (1848).
- Compromise of 1850** admits California as free state; organizes Utah and New Mexico as territories without mention

- of slavery; prohibits slave trade in D. C.; returns fugitive slaves to masters; pays Texas \$10 million for her claim to New Mexico.
- Confederacy** proclaimed by seceding states (Feb. 9, 1861); Jefferson Davis named President.
- Congress of Vienna (1814-15)**. European powers, under leadership of Metternich, meet to settle problems of territory and government resulting from Napoleonic Wars.
- Constantinople** founded (as Byzantium) by Greeks (c. 660 B.C.); made capital of Eastern Roman Empire by Constantine the Great (A.D. 330); captured by Turks (1453); renamed Istanbul (1930).
- Council of Nicaea (A.D. 325)**. Called by Constantine the Great; establishes official creed of Christianity (Nicene Creed).
- Council of Trent (1545-64)**. Called by Pope Paul III, at suggestion of Emperor Charles V, to establish Catholic Counter Reformation.
- "Coxey's Army"** (March. 25-May 1, 1894). Jacob S. Coxey leads 20,000 unemployed on Washington, D. C.
- Crimean War (1853-56)**. Russia loses claim to Greek Christians under Turkish flag.
- Crucifixion of Christ (c. A.D. 29)**. According to New Testament, Christ rose from the dead 2 days later.
- Crusades (1096-1291)**. European Christians, in 7 periods of conflict, attempt to recover Holy Land from Moslems. *See also* Children's Crusade.
- Custer massacre (June 25, 1876)**. Gen. George A. Custer and his forces killed at Battle of Little Big Horn by Sioux.
- Divine Comedy** begun by Dante (1307); probably finished in last year of his life (1321).
- Dominican Order** founded (1215).
- Dorr Rebellion (1841-42)**. Thomas W. Dorr leads unsuccessful attempt to extend franchise in Rhode Island; franchise extended 1843.
- Dred Scott case (1846)**. Dred Scott, Negro slave, sues for freedom on claim he has lived for a time on free soil; U. S. Supreme Court rules (Mar. 6, 1857) that Scott is not a citizen and has no standing in court.
- Dreyfus case (1894)**. Capt. Alfred Dreyfus found guilty of treason in France and sentenced to Devil's Island. Finally acquitted (1906).
- Easter Rebellion (April. 24, 1916)**. Irish nationalists unsuccessfully attempt to throw off British rule.
- Edict of Nantes (1598)**. Extended toleration to Huguenots (French Protestants); its revocation (1685) caused widespread persecution of Huguenots.
- Evolution trial**. *See* Scopes.
- Fawkes, Guy**. *See* Gunpowder Plot.
- Feudalism**, lord-vassal social system, established throughout Europe (9th century); begins to break up (14th-15th centuries).
- Franciscan Order** founded (1210).
- Franco-Prussian War (1870-71)**. France defeated by German states; loses Alsace-Lorraine.
- Freedom of press** established in America as John Peter Zenger, New York editor, is acquitted in libel case against Gov. Cosby (1735).
- French and Indian War**. *See* Seven Years' War.
- French Revolution (1789-99)**. Outstanding events: 1789—Bastille destroyed (July 14). Feudal rights abolished (Aug. 4). 1792—September Massacres (Sept. 2-6). France becomes republic (Sept. 21). 1793—Louis XVI beheaded (Jan. 21); Marie Antoinette beheaded (Oct. 16). Reign of Terror (spring 1793—summer 1794). 1795—Napoleon heads army. Directory established (Oct. 27). (Revolution merges into Napoleonic Wars.)
- Gold rush** develops as gold is discovered at Sutter's Mill, near Sacramento, Calif. (Jan. 2, 1848).
- Great Rebellion (1642-49)**. Civil wars in England. Charles I beheaded (Jan. 30, 1649); Cromwell establishes Commonwealth (1649).
- Great Wall of China** begun (255 B.C.).
- Gregorian Calendar** replaces Julian Calendar in Catholic countries (1582), in Britain and her Colonies (1752), in Russia (1918).
- Gunpowder Plot (1605)**. Guy Fawkes, agent of conspirators against King and Parliament, seized as he is about to blow up House of Lords (Nov. 5).
- Hamilton-Burr duel (July 11, 1804)** results in Hamilton's death next day.
- Hastings, Battle of (1066)**. Normans led by William the Conqueror invade England.
- Hegira (A.D. 622)**. Mohammed flees from Mecca to Medina. Year I of Mohammedan calendar.
- Holy Alliance** formed by Russia, Austria and Prussia (Sept. 26, 1815); intended to regulate government according to Christianity but actually used for repressing political liberty.
- Holy Roman Empire** founded by Otto the Great (962); dissolved by Napoleon (1805).
- Huguenots**. *See* Edict of Nantes; St. Bartholomew Massacre.



- Hundred Years' War (1338-1453).** England loses lands in France. Major battles: Crécy (1346), Poitiers (1356), Agincourt (1415).
- Industrial Revolution begins in England (c. 1760).** Machines gradually replace hand tools, bringing about vast industrial and social changes.
- Inquisition established (c. 1233)** to combat heresy; put under state control in Spain (1480); abolished in France (1772), in Spain (1834).
- International, First (1864).** Founded in London to further world socialism; dissolved in Philadelphia (1876).
- International, Second (1889).** Founded in Paris to celebrate 100th anniversary of French Revolution.
- International, Third (1919).** Founded in Moscow as protest against inactivity of Second International; dissolved (1943). Also called *Communist International* or *Comintern*.
- Jamestown, Va.,** settled by British under Capt. John Smith (1607).
- Jerusalem destroyed by Nebuchadnezzar (586 B.C.);** returned to Jews by Cyrus (538 B.C.); captured by Titus (A.D. 70); captured by Crusaders (1099); captured by Saladin (1187).
- Jesuits (Society of Jesus)** founded by Ignatius of Loyola (1534).
- Joan of Arc** burned at stake (1431).
- Justinian Code (A.D. 529).** Codification of Roman law by Byzantine Emperor Justinian.
- Kansas-Nebraska Act (1854)** abrogates Missouri Compromise; permits territories of Kansas and Nebraska local option on slavery question; results in rioting and bloodshed.
- Leopold-Loeb case (1924).** Nathan Leopold and Richard Loeb kidnap and kill Bobby Franks in Chicago (May 22); sentenced to life imprisonment (July 21); Loeb killed by fellow convict (Jan. 28, 1936); parole refused to Leopold (May 14, 1953).
- Lindbergh flight (May 20-21, 1927).** Charles A. Lindbergh makes first solo flight across Atlantic.
- Locarno Conferences (Oct. 1925)** seek to insure peace and preserve boundaries in Europe by mutual guarantees.
- Louis XVI** beheaded (Jan. 21, 1793). *See also* French Revolution.
- Magna Carta,** charter listing rights and privileges of English barons, proclaimed at Runnymede (June 15, 1215); King John forced by barons to accept it.
- Manhattan Island** purchased by Peter Minuit from Indians (1626) for trinkets worth 60 guilders (about \$24).
- Mary, Queen of Scots,** convicted in England (1586) of being accomplice in plot to murder Queen Elizabeth; beheaded (Feb. 8, 1587).
- Maximilian, Emperor of Mexico,** executed by Benito Juárez (June 19, 1867) after Napoleon III of France withdraws support of Mexican empire.
- Merrimac.** *See* Monitor.
- Mexican War (1846-1848)** ends in American victory; Treaty of Guadalupe Hidalgo signed (1848).
- Ming Dynasty (1368-1644).** Noted for great development of culture and art in China.
- Missouri Compromise (1820)** admits Maine as free state, Missouri as slave state; slavery prohibited in Louisiana Territory north of 36° 30'. *See also* Kansas-Nebraska Act.
- Monitor, Union ship,** defeats *Merrimac*, Confederate ship (Mar. 9, 1862).
- Mooney, Tom,** sentenced to death for bomb explosion in San Francisco during Preparedness Day Parade (1916); sentence commuted to life (1918); freed (1939).
- Mormonism (Church of Jesus Christ of Latter-day Saints)** founded by Joseph Smith at Fayette, N. Y. (Apr. 6, 1830).
- Moses** leads Jews out of Egypt (c. 1300 B.C.).
- Napoleonic Wars (1796-1815).** Outstanding events: 1798—Campaign in Egypt. 1805—Nelson defeats French at Battle of Trafalgar (Oct. 21). French defeat Russians and Austrians at Battle of Austerlitz (Dec. 2). 1813—French defeated in Battle of Leipzig (Oct. 16-19). 1814—Napoleon abdicates (Apr. 11); sent to Elba. 1815—Napoleon flees Elba (Feb. 26). Napoleon defeated in Battle of Waterloo (June 18). *See also* Congress of Vienna.
- Northwest Ordinance (1787).** Adopted for territory north of Ohio River. Establishes method for admitting new states; prohibits slavery in territory.
- Orthodox Eastern Church** excommunicated by Pope Leo IX (1054); schism final between Western and Eastern Churches.
- Parliament** established in England (1295).
- Peloponnesian War (431-404 B.C.).** Sparta under Lysander defeats Athens.
- Persian Wars (499-478 B.C.).** Greece defeats Persia. Major battles: Marathon (490 B.C.), Thermopylae (480), Salamis (480), Plataea (479), Mycale (479).
- Pilgrims** land at Plymouth Rock (Dec. 21, 1620).
- Plague in London ("Great Plague")** causes 68,596 deaths (1665).
- Plymouth Rock.** *See* Pilgrims.

- Poland partitioned out of existence among Prussia, Russia and Austria (1772, 1793, 1795).
- Pony Express (1860-61). Between St. Joseph, Mo., and Sacramento, Calif.
- Pullman strike (June-July 1894). Strike smashed by Federal troops; Eugene V. Debs jailed for contempt.
- Punic Wars (264-146 B.C.). Romans defeat Carthaginians and destroy Carthage (146 B.C.). Major battles: Cannae (216 B.C.), Zama (202).
- Rasputin ("Black Monk"), confessor to Tsarina, murdered (Dec. 31, 1916).
- Reformation (beginning 16th century). Outstanding events: Luther nails his 95 theses to church door at Wittenberg, Germany (1517). Zwingli begins Reformation in Switzerland (1519). Luther burns papal bull and canon law (1520). Calvin publishes *Institutes of the Christian Religion* (1536). Act of Supremacy makes King head of Church of England (1534). Calvin organizes Geneva as theocratic state (1541). Knox establishes Presbyterian Church in Scotland (1560).
- Renaissance (14th-16th centuries). Revival of classical learning in Europe stimulates vigorous activity in arts, literature, humanities, etc.
- Roman Empire established under Augustus (27 B.C.); divided into Western and Eastern Empires (A.D. 395); Western Empire falls (476); Eastern Empire falls with capture of Constantinople (1453).
- Rome founded, according to legend, by Romulus (753 B.C.); burned, perhaps by Nero (A.D. 64); sacked by Visigoths under Alaric (410); sacked by Vandals under Genseric (455).
- Russo-Japanese War (1904-05). Port Arthur surrenders to Japanese (Jan. 2, 1905); Treaty of Portsmouth, N. H. (Sept. 5).
- Russo-Turkish War (1877-78). Power of Turkey in Europe broken; redivision of southeastern Europe at Congress of Berlin (June 13-July 13, 1878).
- St. Bartholomew, Massacre of (Aug. 24-Oct. 3, 1572). Some 50,000 Huguenots (French Protestants) killed in Paris and provinces at instigation of Catherine de Médicis.
- St. Valentine's Day Massacre (Feb. 14, 1929). 6 members of Moran gang lined up against wall by rival gang and shot.
- Savonarola, Florentine priest and dictator, tried for sedition and heresy (1498); hanged and burned (May 23).
- Scopes Evolution Trial held at Dayton, Tenn. (July 10-21, 1925). John T. Scopes prosecuted by William Jennings Bryan for teaching evolution in Tennessee school; defended by Clarence Darrow.
- Scopes convicted but decision later set aside.
- Seven Years' War (1756-63). France, Austria, Sweden, Russia vs. England and Prussia. Clive defeats French at Battle of Plassey (1757), giving British supremacy in India; England wins Canada; Prussia retains Silesia. (American phases of war known as French and Indian War, 1754-63.)
- Shays' Rebellion (1786). Capt. Daniel Shays leads unsuccessful insurrection against Massachusetts government because of economic crisis.
- Slavery in British Empire abolished by Parliament (1833).
- Slavery introduced into American Colonies at Jamestown, Va. (1619); abolished in U. S. by 13th Amendment (1865).
- Snyder-Gray case (1927). Ruth Snyder and Judd Gray murder her husband, Albert Snyder (Mar. 20); both executed at Sing Sing (Jan. 12, 1928).
- Spanish-American War (1898). Outstanding events: U. S. battleship *Maine* blown up in Havana harbor (Feb. 15). Dewey destroys Spanish fleet at Manila (May 1). Charge of San Juan Hill (July 1). Cervera's fleet destroyed off Santiago, Cuba, by U. S. ships (July 3). Treaty of Paris (Dec. 10).
- Spanish Armada destroyed by British (1588).
- Spartacus, Roman slave and gladiator, leads unsuccessful slave insurrection (73-71 B.C.).
- Stamp Act (effective Nov. 1, 1765). First direct tax placed on America by Britain; protested by Stamp Act Congress in New York (Oct. 7-25); repealed by Britain (Mar. 18, 1766).
- Sutter's Mill. *See* Gold.
- Texan war of independence from Mexico (1836). Major battles: Alamo (Mar. 6), San Jacinto (Apr. 21).
- Thaw-White case (1906). Harry K. Thaw, millionaire, murders Stanford White, noted architect, in Madison Square Garden (June 25).
- Thirty Years' War (1618-1648). England, Holland, France, Sweden and German Protestants against Spain, Italy and German Catholics; Peace of Westphalia ends conflict, Alsace going to France, Swiss independence being recognized, and German secularized states being given religious freedom.
- Tours, Battle of (A.D. 732). Charles Martel defeats Moslems, checking their advance in western Europe. Also called Battle of Poitiers.
- Trojan War (c. 1200 B.C.). Greeks defeat Trojans; destroy city of Troy.

**Tutankhamen's tomb** discovered near Luxor by Lord Carnarvon and Howard Carter (1922).

**Tweed Ring**, corrupt New York political group headed by Wm. Marcy Tweed, Tammany Boss, broken up (1872); Tweed convicted (Nov. 5).

**War of 1812** (1812-1815). Outstanding events: 1813—Battle of Lake Erie (Sept. 10). 1814—British burn White House at Washington (Aug. 24-25). Battle of Lake Champlain (Sept. 11). U. S. signs treaty with Britain at Ghent (Dec. 24). 1815—Battle of New Orleans (Jan. 8). (Slowness of communications was responsible for continuation of hostilities after treaty.)

**Wars of the Roses** (1455-85). House of York (white rose) against House of Lancaster (red rose). Richard III slain at Battle of Bosworth Field (1485); Tudor line started by Henry VII.

**Whisky Insurrection** (July-Nov. 1794). Farmers in western Pennsylvania revolt unsuccessfully against excise tax of 1791.

**Witch trials** in Salem, Mass., result in death sentences for 19 women by Judge Samuel Sewall (1692).

**Woman suffrage** first granted in U. S. by Wyoming Territory (1869).

**World War I** (1914-18). Central Powers (Austria-Hungary, Germany, Bulgaria, Turkey) vs. Allies (U. S., Britain, France, Russia, Belgium, Serbia, Greece, Rumania, Montenegro, Portugal, Italy, Japan). Outstanding events: 1914—Austria declares war on Serbia (July 28). Germany declares war on Russia (Aug. 1) and on France (Aug. 3). Germany invades Belgium (Aug. 4). Britain declares war on Germany (Aug. 4). Germans defeat Russians at Tannenberg, East Prussia (Aug. 31). First Battle of the Marne (Sept. 5-12). 1915 Dardanelles campaign against Turkey fails. 1916—Battle of Jutland (May 31). Battles of the Somme (July-Nov.). Germans turned back at Verdun (Sept. 3). Rumania overrun by Central Powers; fall of Bucharest (Dec. 6). 1917—Germany begins unrestricted submarine warfare. U. S. declares war (Apr. 6). Battle of Caporetto (Oct. 24-Dec. 26). 1918—Second Battle of the Somme (Aug. 21-Sept. 3). Third Battle of the Aisne (May 27-June 6). Second Battle of the Marne (July 15-Aug. 7). U. S. troops take St. Mihiel (Sept. 13). Battle of the Meuse-Argonne (Sept. 20-Nov. 11). Allies break Hindenburg line (Oct. 5). Armistice signed (Nov. 11).

**Zenger case.** See Freedom of press.

## Firsts in America

**Admiral in U. S. Navy:** David Glasgow Farragut, 1866.

**Air-mail route**, first transcontinental: Between New York City and San Francisco, 1920.

**Assembly, representative:** House of Burgesses, founded in Virginia, 1619.

**Bank established:** Bank of North America, Philadelphia, 1781.

**Birth in America of English parents:** Virginia Dare, born Roanoke Island, N. C., 1587.

**Botanic garden:** Established by John Bartram in Philadelphia, 1728. (Oldest existing one was established in Cambridge, Mass., in 1807.)

**Cartoon, colored:** "The Yellow Kid," by Richard Outcault, in *New York World*, 1895.

**College to confer degrees on women:** Oberlin (Ohio) College, 1841.

**College to establish coeducation:** Oberlin (Ohio) College, 1833.

**Electrocution of a criminal:** William Kemmler in Auburn Prison, Auburn, N. Y., Aug. 6, 1890.

**Execution for murder:** John Billington, Massachusetts, 1630.

**Five and Ten Cents Store:** Founded by Frank Woolworth, Utica, N. Y., 1879 (moved to Lancaster, Pa., same year).

**Fraternity:** Phi Beta Kappa; founded Dec. 5, 1776, at College of William and Mary.

**Law to be declared unconstitutional by U. S. Supreme Court:** Judiciary Act of 1789. Case: *Marbury vs. Madison*, 1803.

**Library, circulating:** Philadelphia, 1731.

**Newspaper:** *The Boston News-Letter*, April, 1704.

**Newspaper, illustrated daily:** *New York Daily Graphic*, 1873.

**Newspaper published daily:** *Pennsylvania Packet and General Advertiser*, Philadelphia, Sept., 1784.

**Newsreel:** Pathé Frères of Paris, in 1910, circulated a weekly issue of their *Pathé Journal*.

**Oil well, commercial:** Titusville, Pa., 1859.

**Panel quiz show on radio:** *Information Please*, May 17, 1938.

**Postage stamps issued:** 1847.



- President pro tempore of the U. S. Senate:** John Langdon, of New Hampshire, 1789.
- Railroad, transcontinental:** Central Pacific and Union Pacific railroads joined near Ogden, Utah, May 10, 1869.
- Savings bank:** The Provident Institute for Savings, Boston, 1816.
- Science museum:** Founded by Charleston (S. C.) Library Society, 1773.
- Skyscraper:** Home Insurance Co., Chicago, 1885 (10 floors, 2 added later).
- Slaves brought into America:** At Jamestown, Va., 1619, from a Dutch ship.
- Sorority:** Kappa Alpha Theta, at De Pauw University, 1870.
- State to abolish capital punishment:** Michigan, 1847.
- State to enter Union after original 13:** Vermont, 1791.
- State to ratify U. S. Constitution:** Delaware, Dec. 7, 1787.
- Steam-heated building:** Eastern Hotel, Boston, 1845.
- Steam railroad:** Baltimore & Ohio, 1830.
- Strike on record by union:** Journeymen Printers, New York, 1776.
- Subway:** Opened in Boston, 1897.
- "Tabloid" picture newspaper:** *The Illustrated Daily News* (now *The Daily News*), New York City, 1919.
- Vaudeville theater:** Gaiety Museum, Boston, 1883.
- Woman cabinet member:** Frances Perkins; Secretary of Labor, 1933.
- Woman candidate for President:** Belva Ann Bennett Lockwood, National Equal Rights party, 1884.
- Woman doctor of medicine:** Elizabeth Blackwell; received M.D. from Geneva Medical College of Western New York, 1849.
- Woman elected governor of a state:** Mrs. Nellie Tayloe Ross, Wyoming, 1925.
- Woman elected to U. S. Senate:** Mrs. Hattie Caraway, Arkansas; elected Nov. 1932.
- Woman graduate of law school:** Mrs. Ada H. Kepley, Union College of Law, Chicago, 1870.
- Woman member of U. S. House of Representatives:** Jeannette Rankin; elected November, 1916.
- Woman member of U. S. Senate:** Mrs. Rebecca Latimer Felton of Georgia; appointed Oct. 3, 1922.
- Woman suffrage granted:** Wyoming Territory, 1869.
- Written constitution:** *Fundamental Orders of Connecticut*, 1639.
- Zoo:** Philadelphia, 1874.

## Societies and Foundations

- AMERICAN BIBLE SOCIETY:** Founded 1816. Purpose is to encourage wider circulation and use of Holy Scriptures.
- BOY SCOUTS OF AMERICA:** Founded 1910. Purpose is to promote character development, citizenship and physical fitness for boys.
- CAMP FIRE GIRLS, INC.:** Founded 1910. Purpose is to perpetuate spiritual ideals of the home and to stimulate and aid in formation of habits making for health and character.
- CARNEGIE CORPORATION OF NEW YORK:** Founded 1911 by Andrew Carnegie. Purpose is to advance and diffuse knowledge and understanding among people of U. S. and British Commonwealth. Grants are awarded to colleges and organizations engaged in research. Assets (1953): \$177,000,000.
- CARNEGIE ENDOWMENT FOR INTERNATIONAL PEACE:** Founded 1910 by Andrew Carnegie. Purpose is to work toward international peace through research, publications and other educational activities. Assets (1953): \$16,336,414.
- COMMONWEALTH FUND:** Founded 1918 by Mrs. Stephen V. Harkness. Purpose is to promote health through grants for medical education, research, etc. Assets (1954): \$85,000,000.
- ELKS, BENEVOLENT AND PROTECTIVE ORDER OF:** Founded 1868. Purpose is to practice charity, justice, brotherly love and faithfulness. Charitable expenditures (1953): \$6,000,000 for cerebral palsy, blood banks, etc.
- FIELD FOUNDATION, INC.:** Founded 1940 by Marshall Field. Present purpose is to promote the welfare of children and improve intercultural and interracial relations through grants in the charitable, scientific and educational fields. Assets (1953): Over \$10,000,000.
- FORD FOUNDATION:** Founded 1936 by Henry Ford and his family. Purpose is to devote resources to programs for advancement of peace, education, behavioral sciences, democratic institutions and economic stability. Assets (1953): \$518,422,069.
- FREEMASONRY:** Introduced into American Colonies before 1730. Purpose is the moral and spiritual elevation of its members and, through them, of mankind. Masonic orders in U. S. include: Royal Arch, Knights Templar, Scottish

Rites. Side orders: Order of the Eastern Star, Ancient Arabic Order, Nobles of the Mystic Shrine for North America, Mystic Order of Velled Prophets of the Enchanted Realm, Ancient Order of Scots, Tall Cedars of Lebanon, Order of De Molay for boys

**GIRL SCOUTS OF THE U.S.A.:** Founded 1912. Purpose is to help girls develop as happy, resourceful individuals.

**GUGGENHEIM (JOHN SIMON) MEMORIAL FOUNDATION:** Founded 1925. Purpose is to offer fellowships in all fields. Endowment (1954): \$31,000,000.

**INFANTILE PARALYSIS, NATIONAL FOUNDATION FOR:** Founded 1938 by Franklin D. Roosevelt, with Basil O'Connor (volunteer president) and friends. Purpose is to direct and unify fight on every phase of infantile paralysis through research, education and direct help. Funds are raised by "March of Dimes."

**KELLOGG FOUNDATION:** Founded 1930 by W. K. Kellogg. Purpose is to promote health, education and welfare of mankind (principally children) through aids to dentistry, education, medicine, hospitals and nursing fields. Assets (1953): \$89,178,372.

**KIWANIS INTERNATIONAL:** Founded 1915. Purpose is to bring about co-operation among business and professional men and to promote economic and social welfare.

**KNIGHTS OF COLUMBUS:** Founded 1882. Purpose is to promote mutual help of its members and to conduct educational, charitable and religious work.

**KNIGHTS OF PYTHIAS:** Founded 1864. Purpose is to promote social and fraternal well-being of its members. Auxiliary bodies: Dramatic Order of Knights Khorassan, Junior Order of Princes of Syracuse, Order of Pythian Sisters.

**LIONS CLUBS, INTERNATIONAL ASSOCIATION OF:** Founded 1917. Purpose is to recognize community needs and develop means of meeting them directly or by co-operating with other agencies.

**NATIONAL GEOGRAPHIC SOCIETY:** Founded 1888. Purpose is to increase and

diffuse geographic knowledge. The Society publishes the *National Geographic*.

**ODD FELLOWS, INDEPENDENT ORDER OF:** Introduced into U. S. in 1819. Purpose is to promote social and friendly relations and to provide benefits for members.

**ROCKEFELLER FOUNDATION:** Founded 1913. Purpose is to promote well-being of mankind by grants to institutions or agencies in fields of medicine and public health, natural sciences and agriculture, social sciences and humanities. Assets (1954) \$146,718,440.

**ROTARY INTERNATIONAL:** Founded 1905. Purpose is to encourage and foster the ideal of service in business and community life.

**RUSSELL SAGE FOUNDATION:** Founded 1907 by Mrs. Russell Sage. Purpose is improvement of social and living conditions through research. Current value of assets: \$16,500,000.

**SLOAN FOUNDATION, INC., ALFRED P.:** Founded 1934 by Alfred P. Sloan, Jr. Purpose is to increase and spread economic knowledge by means of films, television programs and related materials. The Foundation established the School of Industrial Management at Massachusetts Institute of Technology and the Sloan-Kettering Institute for Cancer Research. Assets (Dec. 1953): \$38,188,090.

**TWENTIETH CENTURY FUND:** Founded 1919 by Edward A. Filene. Purpose is to promote research and public education on current economic and social problems, America's needs and resources, world population and production, foreign trade, farm policies, etc. Assets (Jan. 1954): \$9,655,559.

**YOUNG MEN'S CHRISTIAN ASSOCIATION:** Founded 1844. Purpose is to improve spiritual, social, recreational and physical lives of young people. Endowment (1953): \$53,439,300.

**YOUNG WOMEN'S CHRISTIAN ASSOCIATION OF THE U. S. A.:** Founded 1855 in England, 1858 in U. S. Purpose is to build fellowship of women devoted to pursuit of Christian ideals.

## Longest Broadway Runs

Source: Variety.

1. Life with Father .....	3,224
2. Tobacco Road .....	3,182
3. Able's Irish Rose .....	2,327
4. Oklahoma! .....	2,248
5. South Pacific .....	1,925
6. Harvey .....	1,775
7. Born Yesterday .....	1,642
8. The Voice of the Turtle .....	1,557
9. Arsenic and Old Lace .....	1,444
10. Helzapoppin .....	1,404

## Top Grossing Films

As of Jan. 1, 1954. Source: Variety.

1. Gone With the Wind .....	\$26,000,000
2. The Robe .....	20,000,000
3. Greatest Show on Earth ..	12,800,000
4. Quo Vadis .....	10,500,000
5. Best Years of Our Lives ..	10,400,000
6. Duel in the Sun .....	10,000,000
7. Samson and Delilah .....	9,000,000
8. This Is the Army .....	8,500,000
9. Bells of St. Mary's .....	8,000,000
10. Jolson Story .....	8,000,000

# AMERICAN ECONOMY



ANY ACCOUNT of our economy is simply the story of the way people earn their living and how they live. The economy of the United States has become one of the wonders of the world, envied by most nations, admired by many and feared by some. Our amazing economic growth is the result of many factors, notably our natural resources, our sound fiscal and financial management, our great technical skills and our social and political history. In addition, three wars in the last 40 years accelerated our productive capacity to the point where we now produce about one-third of the world's goods. But the achievement of tremendous productivity can be a hazard as well as a blessing, for a nation faces the danger of recurring depressions when it produces more than its customers can buy. We will try to provide an explanation of this elsewhere in our story.

At this point we would like to introduce a character called the consumer, who, we think, is the hero of the American economy. The consumer—and that means you, me and everybody—has been with us a long time, but his emergence as the center of our economy is a recent development. It is only about 20 years since he began to grow big and strong—strong enough, perhaps, to protect us against the danger of catastrophic depressions.

Americans today consume more than ever before in their history. They buy everything: food, homes, clothing, autos, washing machines, refrigerators and all kinds of services—everything that helps to raise the standard of living.

What has brought about this high rate of consumption? Is it inherent in democracy? Is it a psychological peculiarity of the American people to insist on keeping

up with the Joneses or to want new and better things all the time? Is it our educational system, high wages, government support of farm prices, social security? Is it our highly developed installment system, our productive ingenuity, our seductive advertising methods? No doubt these factors contribute in varying degrees, but they all add up to the new phenomenon of our time—the great American consumer, who wants a better standard of living, earns the money to buy it, and succeeds in getting it.

Some people think that the consumer is on a wild spending spree and that the day of reckoning is due. While this may be true in some measure, all barometers show that most of the spending is sound. If some consumers seem to be gambling recklessly with their incomes and futures, they are no more reckless than the pioneers of our country, who staked an inadequate reality on the chance of a better life and moved from place to place in search of improvement, or people who leave a job to go into business, or investors who gamble in many ways on the future of the country.

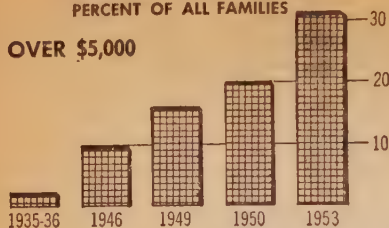
The American urge to gamble and try new things is part of our pioneer spirit. Not everyone turns up a lucky winner; there have been many failures and casualties throughout our history. But if one wants to take a chance, the possibility is there. Social and economic barriers with us are not as rigid as those of other countries. Our society is flexible enough to make it possible for a man to dress like the boss, argue with the boss or even marry the boss's daughter. Socially he is about the freest individual to be found anywhere. If he is to be explained by any one word, it is democracy.—*The Editor.*



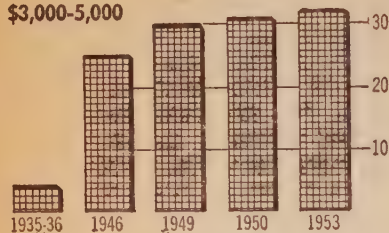
# FAMILY INCOMES

PERCENT OF ALL FAMILIES

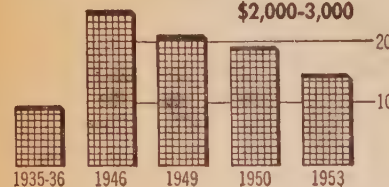
OVER \$5,000



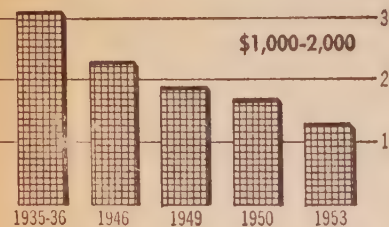
\$3,000-5,000



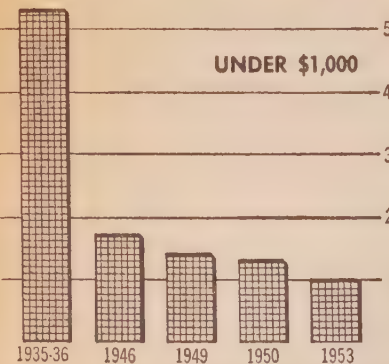
\$2,000-3,000



\$1,000-2,000



UNDER \$1,000

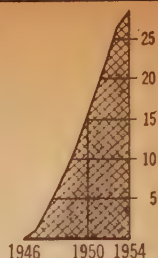


SOURCE: FEDERAL RESERVE BOARD

# HOMES WITH TV SETS



MILLIONS

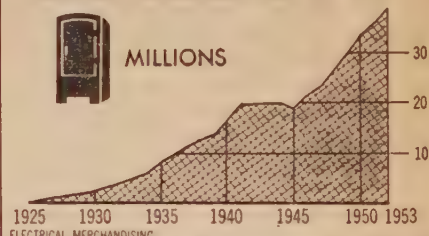


SOURCE: MART MAGAZINE CALDWELL-CLEMENTS, INC.

# ELECTRIC REFRIGERATORS IN USE



MILLIONS

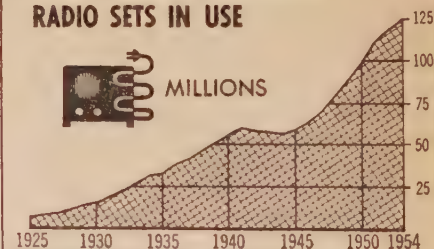


ELECTRICAL MERCHANDISING

# RADIO SETS IN USE



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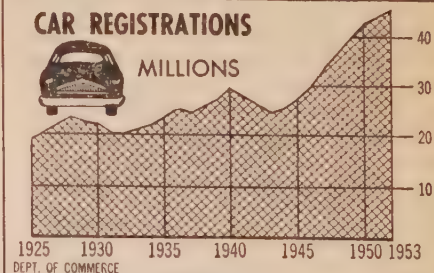


SOURCE: MART MAGAZINE CALDWELL-CLEMENTS, INC.

# CAR REGISTRATIONS



MILLIONS

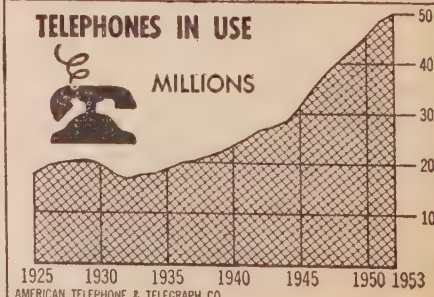


DEPT. OF COMMERCE

# TELEPHONES IN USE



MILLIONS



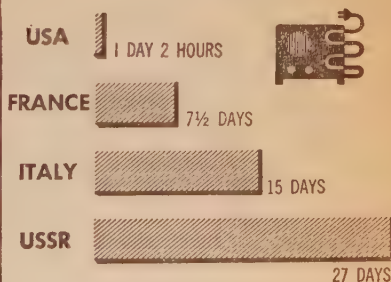
AMERICAN TELEPHONE & TELEGRAPH CO.

## Where We Stand Today

**A**LTHOUGH WE account for only 7% of the world's population, we own almost 50% of its wealth. We make, grow, build, sell, buy and use more goods and services than any other country in the world. Of our population of over 160 million people, about 62 million are employed, and almost 33 million are enrolled in our schools (1953-54). Each year we spend more than \$231 billion on personal goods and services, of which \$72 billion go for food, tobacco and alcohol alone. According to the American Automobile Association, we spend \$9.2 billion on vacations every year. Our personal savings amount to almost \$20 billion annually, in addition to which 3 out of every 4 families are covered by life insurance. Of our 50 million dwelling units, 60% are occupied by their owners. The millions of acres of fertile farmland produce more food than we can eat. Our productive capacity is the largest in the world: we own 29% of the world's railroad mileage, 76% of its automobiles, 51% of its trucks, 47% of its radios, 42% of its electric power output, 47% of its steel. Our natural resources are tremendous: each year we produce 51% of the world's output of petroleum and about 30% of its coal. Our merchant fleets have replaced Britain's as the rulers of the seas, and we have the greatest volume of foreign trade.

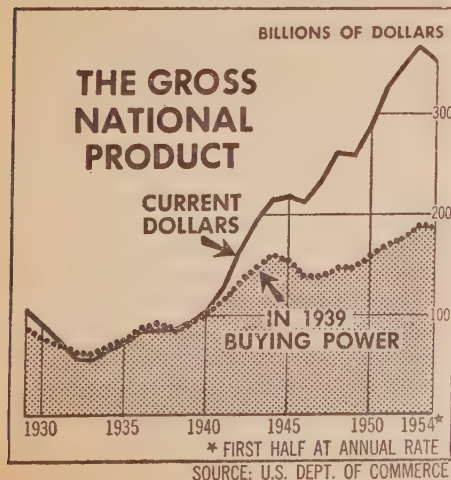
When we total up what we as consumers spend and add to it the expenditures by government and business, we arrive at the Gross National Product (GNP). This figure is one of the best over-all measures of our economic growth and health, since it represents the total output of our economy. The upper line in the Chart opposite shows how much this total output was worth in actual dollars. The lower line shows what the value would be if the dollar today bought as much as it did in

### WORKTIME NEEDED TO BUY \* A RADIO SET



1939. This line, therefore, represents the physical volume of goods and services we have produced. It shows us that the physical output was roughly 3 times the figure for the depth of the depression and almost twice what it was in the "good" year of 1929.

This list of assets is by no means a complete picture of our prosperity. What it means to us individually can be shown by how much an hour's work will buy in this country as compared to other countries. As the Chart above shows, something we take for granted—a radio, for instance—means weeks or even months of labor for people in other countries. The increases in per capita income shown on page 781 indicate how much greater the buying power of every man, woman and child in the U. S. is today compared with 1929.



## Where We Started

THE U. S., like all new countries, started poor in capital and badly in debt. There were many factors, however, in its favor, among which the following were important:

1. It established its credit-worthiness, guaranteeing the payment of public debt and assuring a sound banking and monetary system. Europeans, in consequence, were ready to lend to the government and to private borrowers.

2. It opened its lands and natural resources to quick settlement and exploitation. Americans, therefore, were able to feed themselves and produce at once goods for sale abroad with which to settle their international accounts.

3. It encouraged emigration from Europe freely: the millions who poured in settled on the land and after the Civil War worked in our mines and factories.

4. Government placed no obstacles in the way of private enterprise. Antitrust laws curbed bigness, so that all sorts of innovators were given a chance to invest

in new enterprises and profit from them, if these were successful.

The U. S. slowly grew in economic strength until the Civil War. There were two great turning points in its history. The first occurred during the years 1865-1900 when a nation essentially agricultural began to industrialize itself. These were the years when many of the country's railroads were built and when its great industries of steel, petroleum, machine tools and electrical equipment made their appearance. It was the period of such great innovators as Carnegie and Frick in steel, McCormick in agricultural implements, Rockefeller in petroleum, Westinghouse in electrical equipment and Hariman and Hill in railroads.

The second occurred during World War I, when the U. S. for the first time became a creditor nation. That is to say, foreign countries began to borrow from us, and our investments and loans began to flow into every corner of the globe, so that by 1953 we had virtually \$40 billion invested in foreign countries.

## The American Consumer

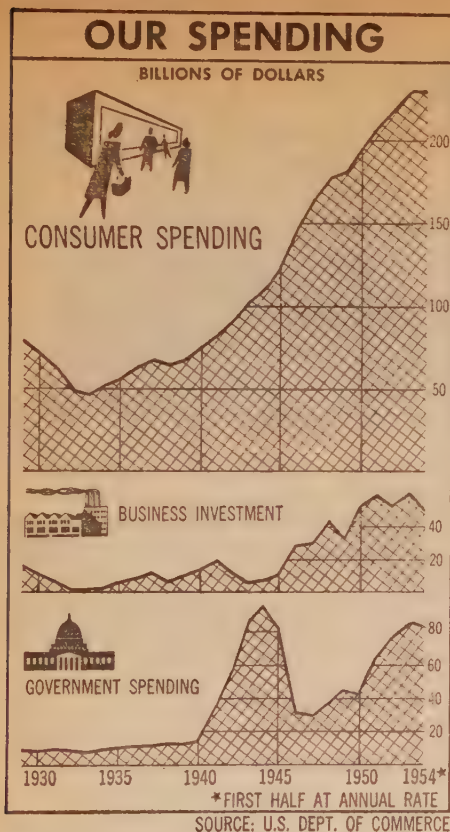
You and I and the fellow next door buy over twice as many goods and services as business and government combined, as the Chart on page 755 illustrates. Economists and businessmen are so concerned about how we spend our money that they are constantly searching for new ways to find out what goods we want. The Federal Reserve System sends out interviewers every year to question a cross section of the American people about how they expect to spend their income during the year and how they are doing financially. Manufacturers have plunged into psychological research programs to find out what makes people buy.

Let's take a closer look at this American consumer whose wishes and choices play such a vital role in our economic health. For one thing, his share of the total product—in earnings—has risen dramatically in the past 15 years. The average worker

in industry now earns 50% more in real wages (purchasing power) than he did in 1939. (See Chart on page 756). In addition, the tremendous rise in productivity has increased the amount and variety of goods available to him. We must also realize that more people are working now than in the past. The Chart on page 756 shows that what not so long ago was considered a pipedream of 60 million jobs has become a fact. Not only does the individual worker earn more but in many families today there is more than one wage earner. Today nearly one-third of working people are women, more than half of them married.

This trend to 2 or even 3 pay checks a week in many families, along with the steady rise in earnings, largely explains the increase in the amount each family has to spend. As the Chart on page 752 shows, the number of families with \$3,000 to





\$5,000 a year to spend jumped from 4% in 1935-36 to 32% in 1953. How this increased spending power has turned the luxury products of yesterday into the common household items of today is illustrated by the Chart on page 752.

It is important to note that these income gains have not gone equally to all people in all sections of the country; some have gained more than the average, others have fallen behind. But there has been a general leveling because the lowest earning groups have made the greatest relative improvement, while the top groups have lost ground as a result of progressive tax rates.

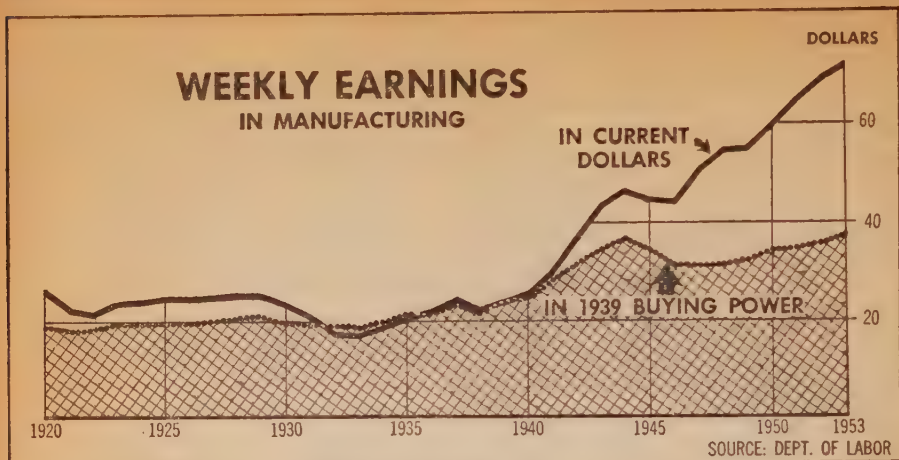
The dollars we get today are worth much less than in prewar days. The much-quoted "Consumers Price Index" Chart on page 757 shows that we must pay about 90% more for the things we buy today

than in 1939, and the greatest price increases have been in necessities and food. But the Chart on page 756 shows that even allowing for the inflation we are as well off now as at the peak of the war, and better off than at any other period in our history. The chart measures our "real income," the amount of goods and services the average production worker can buy with the dollars he receives. Note, too, that the number of hours we work has decreased steadily while our incomes have been rising. The Chart on page 757 shows how much less time is given to the job today than 60-odd years ago.

One of the interesting facts about our high income level is the way our buying shifts as we earn more. For example, the proportion of our income which we spend on luxuries increases, while basic services, like rent, light and heat, account for proportionately less of our spending. These changing "spending patterns" are vitally important to the manufacturers and others who provide consumer goods and services. They follow them closely as signposts to what kinds of goods we consumers will want and buy in the future.

To round out our picture of the average consumer's position, we must consider his savings and debts. During World War II, many people accumulated savings both for patriotic reasons and because many goods were short. After the War they went on a spending spree, buying more refrigerators, cars, washers, television sets, etc., than ever before. But once most of these wants were satisfied, people began to save again. Today, 7 out of 10 families have some liquid savings in bank accounts or defense bonds, and many people own stocks, bonds and real estate.

Even with today's high incomes, few of us have enough cash on hand to pay in full for a new car or deep freeze. And even if we do have the money, we may want to save it for emergencies. So, when it comes to these "big-ticket items" most of us turn to the installment plan. Almost 2 out of 3 automobiles, refrigerators and other appliances are bought on credit today. This habit of mortgaging part of our future income is a bone of contention for the economists.



## Manufacturing

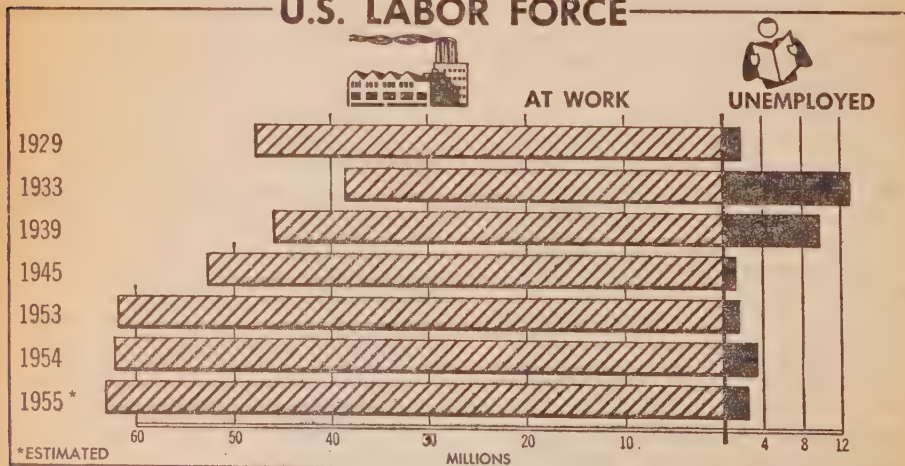
**T**HE REAL GROWTH of our industrial powers dates from the Civil War. By World War I, the U. S. had become the leading industrial nation in the world, thanks to the settling of the West and the development of transportation, the introduction of mass production methods, and the growth of many industries, especially steel, petroleum and electric power.

While the two World Wars were draining the resources of Europe and destroying millions of dollars worth of plants and machinery, America was busy developing her resources and expanding her plant.

And during the postwar period, when Europe's energies and resources were consumed in merely restoring her damaged industries, we were modernizing and increasing our productive capacity at a record rate. Since 1939, we have more than tripled the productive capacity of our industry. Today, manufacturing provides jobs for nearly one out of three workers and produces over 33% of our national income. (See Chart on page 759.)

But not all of this superiority can be attributed to the fortunes of war. Without such techniques of mass production

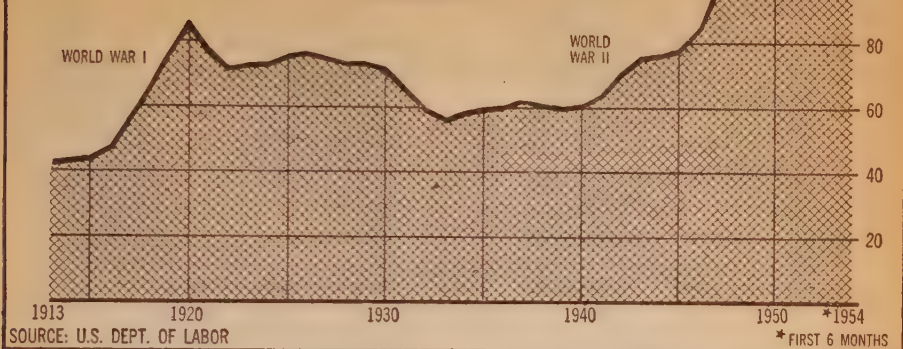
## U.S. LABOR FORCE



SOURCE: DEPT. OF LABOR, BUREAU OF THE CENSUS

# CONSUMER PRICES

1947-49=100

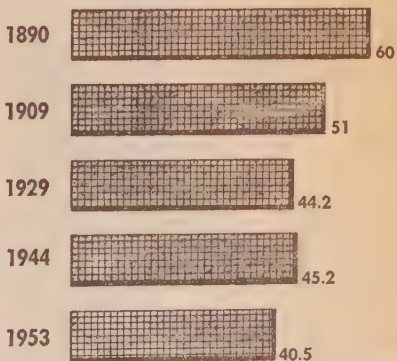


as standardization and the assembly line, the tremendous output of many of our industries would not have been possible. Credit for successful pioneering in these methods is generally given to the motor industry, especially the Ford Motor Co. The low-priced car, which was made possible by reduced costs, put the automobile within reach of millions of buyers. This sped the growth of the automotive industry, until today it is one of the largest in the U. S. It employs 760,000 production workers with a payroll of \$3 billion, while retail stores dealing in motor vehicles, parts and accessories, registered sales of over \$33 billion in 1953.

Another very important factor has been the frequent replacement of old machinery and processes by new. Machinery did only about 6% of the heavy labor in 1850; today the figure is 94%. Our industry is now replacing its machinery at least twice as fast as British industry, so that American workers have newer and more efficient equipment than those in other countries. The Chart on page 758 indicates the rate at which we have been adding better equipment in recent years. There have been 3 big waves of spending for replacement since 1939: the war preparation period of the early 40s, a postwar drive to replace worn-out machinery and equipment, and finally a tremendous surge of expansion and modernization beginning in 1951.

Growing productivity has meant greater profits for industry, as well as higher wages for employees and lower prices for the consumer. The long-term trend of corporate profits is upward, though there have been some bad years. Even after paying heavy taxes and generous dividends, industry had large sums left to plow back into expansion and modernization. In addition, many thousands of individual Americans have contributed to this growth by investing their savings in long-term bonds or new stock issues. A significant aspect of this heavy business investment has been the amount of money devoted to re-

## WORKING HOURS PER WEEK IN MANUFACTURING



SOURCE: DEPT. OF LABOR



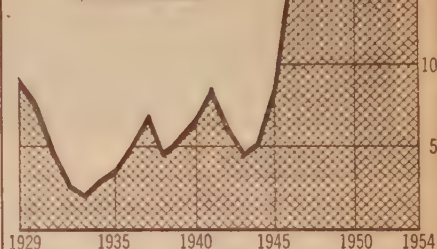
search. Antibiotics, electronics, freezers, frozen foods, air conditioning, synthetic detergents and plastics are some of the important new industries which have sprung from industrial and scientific research. The American consumer's unfailing willingness to buy has made these new industries successful.

### STEEL

Since the key to industrial might is steel, our position as the leading industrial nation is indicated by the fact that we produce nearly 3 times as much steel as the Soviet Union and 1.6 times as much as all the nations of Free Europe combined. Our iron and steel industry got its start in the 1640's, when the first permanent iron works was built in Massachusetts with a rated capacity of one ton of pig iron a day. During the next 200 years, the production and use of iron and steel grew slowly. But the next 40 years were a period of rapid growth, thanks to such important developments as the invention of the Bessemer converter and the open-hearth process, the discovery of the vast Lake Superior iron-ore ranges and the extension of railroads. The substitution of coke for charcoal in ore refining, though it took place much earlier, gained new significance with the realization that our immense coal resources were far more extensive and easily avail-

### NEW PLANT AND EQUIPMENT EXPENDITURES

BILLIONS OF DOLLARS



SOURCE: U.S. DEPT. OF COMMERCE

able than our timber lands. By 1890 the U. S. had won the lead in steel production, which it has never lost. By 1951 the steel industry's 1,200 furnaces could make as much steel in 45 minutes as the country had produced in an entire year during the Civil War. Our current rated capacity is 124.3 million tons a year, 20 million more than in 1951. The size of our steel industry compared to other nations is illustrated in the Chart on page 759.

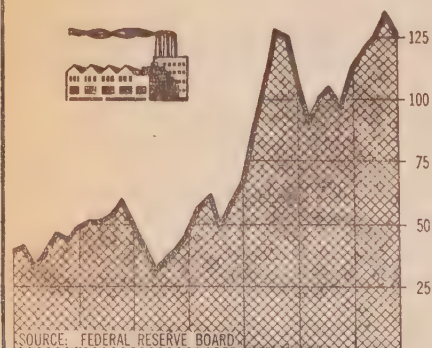
Some iron and steel go into the operation of every industry, but the leading consumers of steel in the postwar period have been (1953 percentages): the automotive industry with 18.9%; warehouses serving small business, 19.2%; construction, including plumbing, 17.1%; the tin can and container industry, 7.8%; machinery and industrial equipment, 8.3%; railroads, 6.2%. The oil and gas industry took 7.1%.

### AMERICAN INVENTIONS

Without the inventive genius of Americans, our industries could not have turned out the quantity, quality and variety of goods that make our standard of living what it is. We conquered the problems of space by inventing or improving the steamboat and the twin-screw propeller,

### INDUSTRIAL PRODUCTION

1947-49 = 100



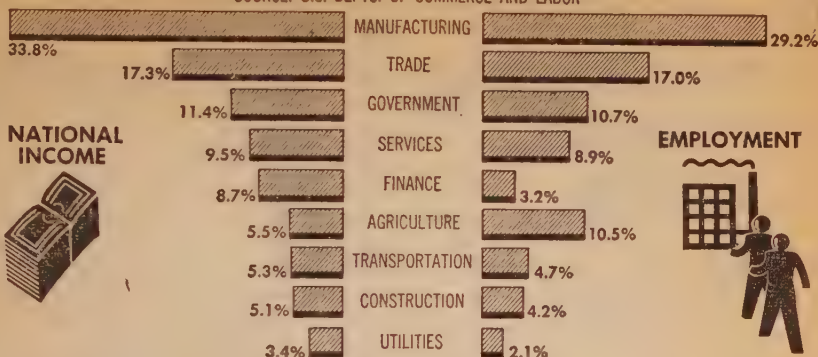
SOURCE: FEDERAL RESERVE BOARD

1919 1925 1930 1935 1940 1945 1950 1954 \*

\* 6 MONTHS, SEASONALLY ADJUSTED, PRELIMINARY

# NATIONAL INCOME AND EMPLOYMENT

SOURCE: U.S. DEPTS. OF COMMERCE AND LABOR



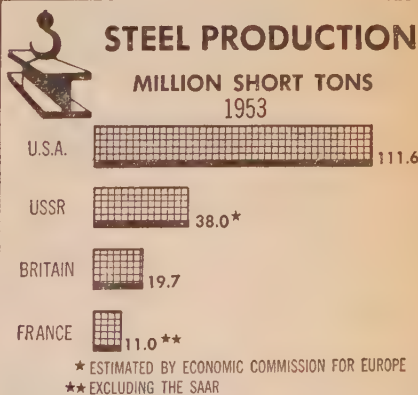
by improving railroads, by inventing the air brake, coupler, electric-lighted car, pullman, refrigerator car. Automobiles meant nothing until our inventors gave us the self-starter, better transmission and differentials; our invention of pneumatic tires was preceded by vulcanized rubber; and the petroleum industry would have been insignificant if we had not learned how to crack gasoline. The airplane is an American brain child. In communications, the telegraph and telephone were ours, while radio would have been insignificant without our vacuum tube. Currently with a Scotchman, but independently, an American perfected television, and color television is now an actuality.

The farmer has been the beneficiary of such labor-saving aids as cotton gins and cotton pickers, reapers, harvesters and threshers (ultimately made into combines), seeders, binders and cream separators. The caterpillar tractor, which is replacing the horse, has made extensive farming possible.

Our mode of dress has been determined for us by invention. The shoe-sewing machine, the welt sewer, the shoe-last machine created an industry just as the sewing machine, later electrified, and the cloth cutter led to our ready-to-wear factories. Materials such as rayon, nylon and dacron are achievements of our synthesists and plastic experts.

Our office staff utilizes the fountain pen, the typewriter, the adding machine and other comptometers, all American inventions. They take care of finances with the aid of the cash register and the check writer.

The housewife's cleaning chores are simplified by the carpet sweeper and vacuum cleaner, her Mondays by the washing machine, drier and electric iron. Her marketing is made easier by her refrigerator and freezer, American invented, filled with frozen foods. She cooks with improved ranges, gas or electric, sometimes with a pressure cooker. Her larder is stocked with canned goods (an American improvement on the old French invention), and countless minutes are saved



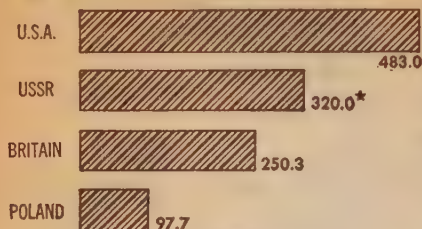
SOURCE: UNITED NATIONS



## COAL PRODUCTION

MILLION SHORT TONS

1953



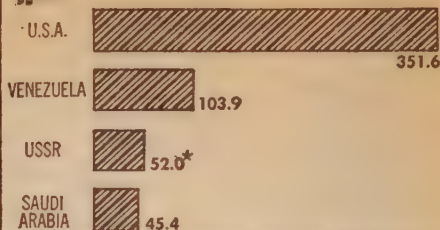
\* EXCLUDING SAKHALIN ESTIMATED BY ECONOMIC COMMISSION FOR EUROPE



## OIL PRODUCTION

MILLION SHORT TONS

1953



\* ESTIMATED BY ECONOMIC COMMISSION FOR EUROPE

SOURCE: UNITED NATIONS

by such simple things as a safety pin or a zipper. Her husband substitutes the safety or electric razor for the straight-edge blade or the barber. The family can stay up late reading by incandescent light or listening to the phonograph. Or they can go out in the sunlight and take camera shots, even in color, or motion pictures with the aid of American inventions. If it is too hot or too cold, they can turn on electric fans, heaters or air conditioners. Certainly they could not keep up with the news if Americans had not invented the rotary press and the linotype. Further, who could live in an elevator apartment or work in a skyscraper if an American had not invented the power elevator?

Without the inventive genius of Americans, our industries and our way of life

would have been far different from what they are today.

## EDUCATION

As an economy advances from the simple processes of working raw materials (agriculture, for example) into the employment of large capital outlays (manufacturing and mining) and the greater role of service industries (transportation, the professions, distribution), it requires more and more human skills. There are many ways by which we know economic progress is taking place, and most of them have been mentioned here: improvements in the productivity and the real income of the working population, larger capital investments, speed of replacement of capital plant, etc., etc.

An economic engine also becomes superior with the improvement of the *quality* of the goods and services it turns out. In part, this is because the machines are better; perhaps, in greater part, because the human skills being employed are also improving in *quality*. This latter factor is the result of education.

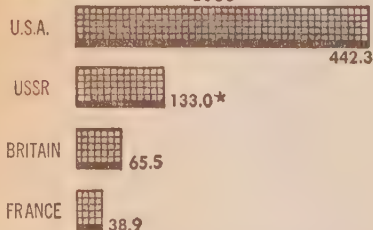
Today in the U. S. there are about 2,250,700 persons attending colleges, universities, and professional schools. In Great Britain, their number is less than 90,000. Correcting for population, America is educating ten times as many persons as is Britain for employment as highly skilled technical and professional workers. A good deal of our strength economically is to be found in this single fact.



## PRODUCTION OF ELECTRIC ENERGY

BILLION KWH

1953



\* ESTIMATED BY ECONOMIC COMMISSION FOR EUROPE

SOURCE: UNITED NATIONS



In the U. S., also, more and more of our professional training is taking place at the university level; that is, professional or technical schools follow a partial or full college education instead of being

its substitute. The latter is the situation in Europe. All this accounts for superior technical training of a large and growing population and, consequently, a superior productivity.

## Our Natural Resources

THE ECONOMIC expansion of the U. S. would have been impossible without our vast natural resources and the skill to develop and use them. As the frontier was pushed back, more and more natural wealth was uncovered. The present size and value of our known coal, iron, aluminum, petroleum, gas and coal deposits and of our timberland are impressive. The value of minerals, both metallic and non-metallic, produced in 1880 was \$367 million; in 1950 this figure was close to \$12 billion. As the Charts on page 760 show, the U. S. is the world's leading producer of oil, coal and electric power.

America's first coal mine was placed in operation near Richmond, Va., in 1745. Gradually, rich veins were discovered in other parts of the East and Middle West, but development of mines was slow through the remainder of the century. In the period 1807-20 only 15,000 tons of coal were mined. These were used for home heating and for generating steam power for the little industrial activity that went on. About 1860, some 20 million tons were produced annually, almost half anthracite or "hard" coal. At the turn of the century, there were 2,555 bituminous or "soft" coal mines (used principally in industry) producing over 193 million tons. Today, some 7,500 mines can turn out in excess of 500 million tons annually—over 30% of world production. 28% of the nation's current output of bituminous coal comes from West Virginia, 22% from Pennsylvania. Pennsylvania produces all of the nation's anthracite—approximately 30 million tons in 1953.

The growth of steel, electric power, railroads and other industries would not have been possible without our vast coal deposits. Coke, made from coal, is essential in steelmaking. The steel industry depends upon coal for 80% of its heat and energy requirements. The electric utilities

alone consumed more than 100 million tons of bituminous coal in 1953. The development of coal tar gave rise to a great variety of chemical products, such as tar, aspirin, sulfa drugs, soil fertilizers, plastics, nylon and dyestuffs.

The modern mine is a highly mechanized underground factory. Production has risen from 5.22 tons per man-day in 1932 to 8 tons at the present time. By comparison, the Polish miner, the world's next most proficient, produces about 2 tons per day; the British miner, 1.79 tons.

The petroleum industry was born in 1859 when the first oil well was drilled in Titusville, Pa., producing about 20 barrels of oil a day. Today there are 498,940 operating oil wells, each producing an average of 13½ barrels daily or 48% of the world's output.

Oil was first sought to replace whale oil in lamps, and for many years kerosene distilled from petroleum was its principal product. The only other major use for petroleum was lubrication, gasoline being a useless by-product. The development of the automobile created a demand for gasoline and oil which grew rapidly with the military needs of World War I. Today, gasoline accounts for nearly 45% of the yield from a barrel of crude oil, while oil and natural gas provide 64% of the nation's total energy requirements. Petroleum by-products have become the source of large numbers of compounds used by other industries—rubber, drugs, paints, cosmetics and many chemicals.

The use of electric power in industry and in the home was probably the one most important contributing factor to America's productive capacity and higher standard of living. Whereas in 1850 only 6% of total work was done by machines, 94% of work output today is accomplished by machines, most of which are operated by electricity.

Thomas A. Edison's first central station, which was built in New York City in 1882, provided electric light in a 12-block area. Today, over 390 billion kilowatt-hours annually serve 44 million residential and farm consumers and over 6 million commercial, industrial and other customers. Over 73% of the electric energy is generated by mineral fuels, the rest by water-power. Some 80% is produced by private industry and 20% by publicly owned companies. The growth of the power industry has not reached its peak. Installed capacity, at the turn of the century a little

over 1.2 million kilowatts, is now almost 100 million kilowatts. Further expansion is certain as more houses and factories are built.

In industry the use of electric power has shortened the work day, increased the output and brought down prices. The development of electric appliances has eased the lot of almost everyone. From the vacuum cleaner and washing machine to the electric razor, the saving in time and energy to the average American has been incalculable. (See page 789 for output of electricity and source of energy.)

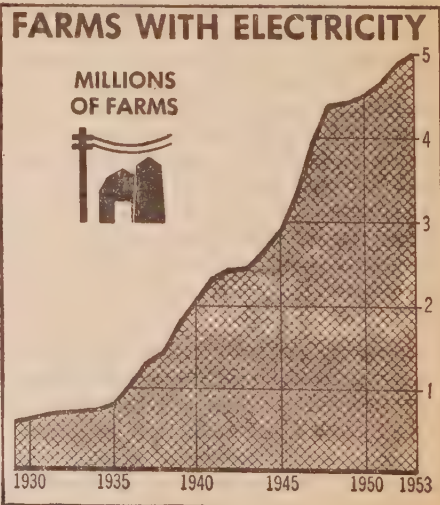
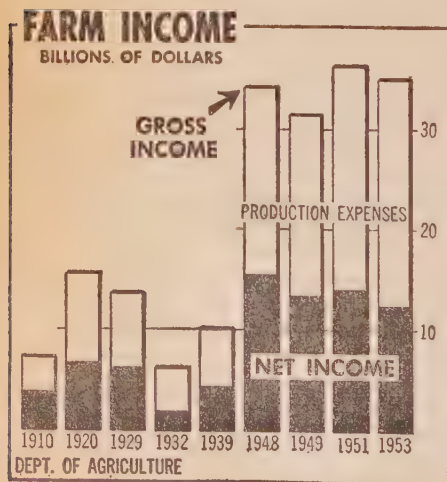
## American Agriculture

**A**LTHOUGH we have become an industrial society, we are still one of the leading producers of foods and fibers. Not only have we been able to produce more farm products over the years, but it has been possible to do so with fewer people. While 34.7% of the population lived on farms in 1910, the figure is 16% today. From 1910 the value of farm output has increased from \$7½ billion to over \$36 billion. In the early 1900s a wheat farmer labored over one hour to produce one bushel. Today he can grow and harvest that bushel in 20 minutes. The corn farmer who put in one hour and 20 minutes for every bushel now can produce it at the cost of a little over 30 minutes of work. Increased

use of more efficient machinery, electrification, better fertilizers and insecticides and improved hybrid seeds are some of the reasons that account for this increase in output.

The number of farm tenants has declined substantially. 73.2% of all farms are occupied by owners as compared with a low of 58.6% in the 30s. The electrification of over 90% of farms has enabled American agriculture to enjoy many work-saving devices and comforts. Net income from farming has increased from \$4.5 billion in 1910 to \$13 billion.

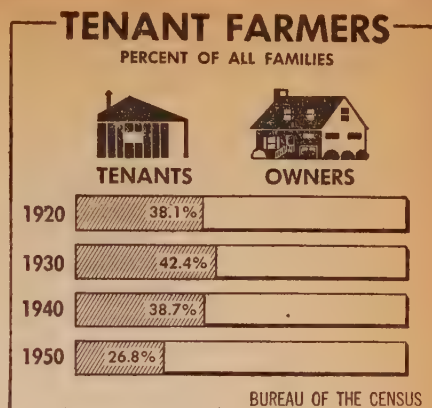
Although the American farmer has made progress, it has been interrupted. The re-



sult of his year's labor hinges on variable weather conditions, something which is not true of most other economic activities. His production expenses have been going up out of proportion to his income. As the Chart on p. 762 illustrates, the gross income of the American farmer has risen, but his real income has fallen. As always, he faces the threat of overproduction and a drop in market prices.

These difficulties create a risk of deserted farms and dwindling crops, a risk which the nation cannot afford. One way in which the government comes to the aid of the farmer is by assuring him of a "parity" price for his products—that is, a price which will prevent his purchasing power from falling. This means, for example, that the income from a pound of cotton will buy for the farmer as much today as it did during the years 1909–14.

The government also tries to enter into an agreement with the farmer to limit production or to limit his sales. Compensation is offered in return for limitation of production. It is up to the individual farmer whether or not he accepts this plan. In the case of the limitation of sales under a marketing quota, the decision is made by a 2/3 vote of the crop association. Under some of these plans the



government acquires the products which are left unsold.

During the war, prices of most agricultural commodities were well above parity, but in recent years the trend has been reversed. The government has been forced to buy and store large quantities of agricultural produce. In 1954, President Eisenhower succeeded in easing this problem by getting Congress to pass flexible price supports, varying from 75% to 90% of parity. At lower parity rates, the government does not have to buy as much produce as before.

## Construction

**N**EW PLANTS, factories, houses and public facilities, financed by both public and private funds, are going up by the thousands all over the country. Construction in 1954 was roughly  $4\frac{1}{2}$  times the 1940 level. The demand for private dwelling units, stimulated by the rapidly rising birth rate and rises in real wages, accounted for over a third of the building. By the middle of 1954 over  $8\frac{1}{2}$  million new dwelling units worth \$80 billion have been started since the end of World War II. The trend for some time has been away from renter-occupied dwellings (see the Chart on p. 765); home ownership has increased 54% since 1940. Even if the backlog of demand for new houses were satisfied, the need for replacement, modernization and repair of older units will

continue for some time. As the Chart on page 764 shows, there are many homes without the facilities we have come to consider necessities.

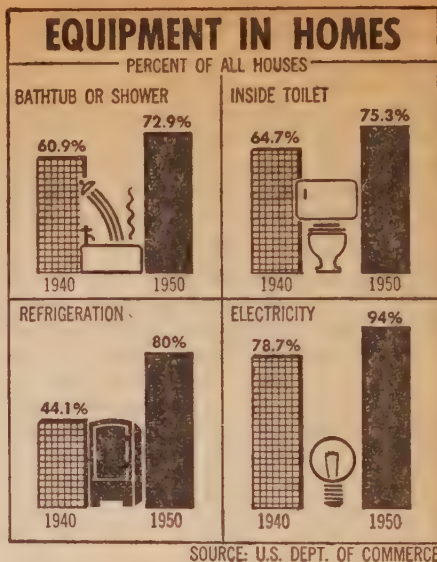
Business needs for new plants could not be filled until 1945 as long as critical materials had to be diverted to armaments. Since 1945, \$25.5 billion has been spent on industrial and commercial construction and \$27.8 billion has gone into public-utilities plants, financed with private funds. Farm construction amounted to \$13.1 billion during this period. Business expects to put even more funds into plant expansion.

Of the nearly \$61.6 billion spent by the Federal, state and local governments on construction since the end of World War II, the largest amounts were spent on



highways (\$18.3 billion), sewer and water works (\$5.2 billion) and military and naval facilities (\$4.8 billion). Public housing accounted for \$3.4 billion. With the increase in the number of children of school age, the demand for more educational facilities constantly mounts. Many cities have already reached a critical pass because of inadequacy of classroom space which began when the first group of "war babies" arrived at school age.

The size of the present construction boom has had a decided effect on other industries, not only because of the vast variety of materials that go into building, but also because the huge number of new homes means bigger markets for utilities, furniture, household appliances and many other consumer goods. In fact, as long as construction demand continues strong—and it appears to do so—the danger of real recession is slight; for construction, which now employs 2.5 million workers, is an important business indicator. When it slacks off, storms are ahead (as during 1928); when it continues, important sectors of the economy—the heavy industries,



finance—are in good shape. Indeed, the chief reason, industrially, for the prosperity of 1946 and after, has been continued demand for automobiles and construction.

## Transportation

**I**N OUR early days, natural waterways played their most important role. In the early 1800s, canal and river barges carried the bulk of manufactured goods into the territory west of the Alleghenies in return for agricultural products. Even today, the Great Lakes and our great rivers and man-made canals handle much of the raw materials going into manufacturing—iron ore, lumber, cement, coal, grain—about 500 million tons annually.

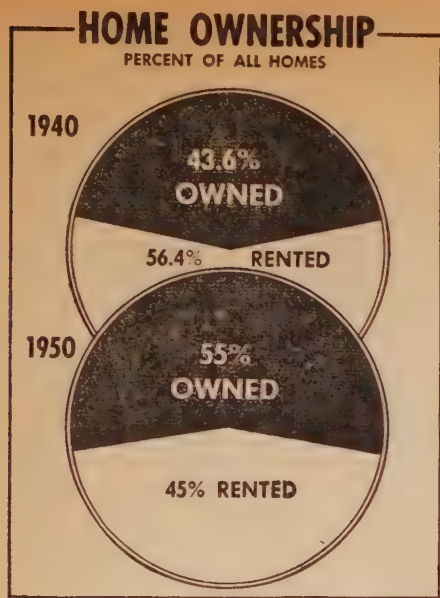
On Jan. 7, 1830, a horse-drawn railway carriage rolled out of Baltimore on the first stretch of B & O track to be completed—marking the beginning of common-carrier railway service in America. But as late as 1850 there wasn't a mile of track west of the Mississippi. From 1869, when the Union Pacific was completed, our railroads began spreading into every corner of the country. The decade 1880-1890 was the period of greatest expansion: a total of 70,300 miles were laid in that time.

Today there are 223,300 miles of track—29% of the world's mileage.

The growth of railroads encouraged settlement and development of the western half of America by eliminating the long and often hazardous journey around Cape Horn or overland by horse and wagon. Commerce between East and West, North and South grew rapidly.

Today the 680 railroads carry close to 500 million passengers annually and transport over 2½ billion tons of freight. It is estimated that they operate 12,500 freight trains daily. Put another way, about 9 freight trains start on their runs every minute of the day and night, on an average.

A little over 50 years ago there were still large areas that could not be reached by railroad. The automobile, the truck and the bus helped to fill this gap. This new means of transportation contributed heavily to the growth of other industries, altered our methods of retail and whole-



SOURCE: U.S. DEPT. OF COMMERCE

sale distribution and changed our living and eating habits.

In 1900, only 8,000 motor vehicles were on the road, and a good road was a rarity. Today, over 54½ million cars, busses and trucks crowd our 3 million miles of highway. The motor vehicle created new demands on the steel, nonferrous metals, petroleum, rubber and textile industries. It helped to relocate industry and spread out our cities. It has been partly responsible for the shift of population into suburban areas and has ended the isolation of America's farms and small towns. The

family car has become more and more important in vacation plans. Since 1939 the number of tourist courts, motels, etc., has risen from 13,521 to 49,000.

Although they celebrated the 50th anniversary of powered, controlled flight during the year 1953, the U. S. scheduled airlines did not begin to carry both mail and passengers until 1926. In February of that year, the Government turned over its mail activities to private enterprise. Passenger service was inaugurated a few months later, the same year, each plane carrying 1,000 lb. of mail and two passengers. It was not until the 40s that passengers and nonmail cargo began to become important sources of revenue. By 1952 the scheduled airlines had become a billion-dollar industry. 77% of its revenues came from passengers. In 1926, less than 6,000 passengers were carried; by 1952 that figure had swelled to 26½ million. Freight revenues, too, have been rising at a rapid rate. By 1950, scheduled domestic airlines were flying about 2½ times as many freight ton-miles in one week as they flew during all of 1942.

Pipelines carry oil and gas to power, industrial and heating plants, and pipe gas into our homes. Pipelines made their appearance in the petroleum industry very early because of their economy. There are close to 180,000 miles of petroleum and 167,000 miles of gas pipeline in the U. S. today.

The tables on page 792 show the part that each carrier plays in transporting freight and passengers.

## Distribution

A UNIQUE characteristic of the American economy is the part played by distribution. Other countries, of course, have wholesale and retail establishments, transportation and advertising facilities. But nowhere have these functions played such a large and important role as in the U. S. Our highly developed mass distribution system makes the whole country one market. Consumers in New York, Chicago, Los Angeles or any other city can obtain meat from Texas, oranges from Florida or

California, potatoes from Idaho or Long Island, salmon from the Columbia River. Unlike many other countries, our free commerce and the efficiency of our transportation system, wholesalers and retailers make it possible to develop nation-wide as well as local markets.

The wholesaler serves the retailer in several important ways, not only by stocking wide assortments of merchandise and maintaining ready inventories near the stores' locations, but also by extending

credit and merchandising and management aids. The small retailer, particularly, could not operate without his wholesale supplier. It is hardly surprising that even during the 10-year period beginning with World War II, the number of wholesale establishments increased by over 20%. It is still growing.

The distinctive forms American retailing have taken have fascinated, and sometimes amused, the rest of the world. Early American settlements were isolated, partly because of the great expanse of the country, partly because of the preponderance of farming and the absence of villages. For American farmers liked to live on their farms instead of in villages, as was the European custom. (And in villages there were country stores and the customary services of repair shops and skilled artisans.) The itinerant peddler and mechanic became a necessity in a pioneering world. These travelers sold household necessities (hardware and notions), knew how to make simple repairs, and began to hawk from door to door the new inventions. The first that were marketed in this fashion (the agents also did this on the installment plan) were the agricultural machines of the McCormick Company and the household sewing machines of the Singer Company. Interestingly enough, many great retail enterprises in America had their beginning in peddlers' packs. F. W. Woolworth began as a peddler, for example.

The vast spread of the American farming community and its prosperity, from 1897 to 1921, helped in the creation of another unique American marketing device, the mail-order house. It was natural that the center of such companies should be Chicago, for the city was the heart of the great corn, wheat and meat belts. Using richly illustrated catalogues, which soon were printed in color, these mail-order houses sold clothing and household appliances; as the automobile became popular they sold parts and insurance; ultimately they were making available farm machinery, consumer durable goods, heating units, etc. Their annual sales ran into billions of dollars.

The department store was a development of the cities, although there always existed European prototypes. Department-store combines, under a single management, were able to take advantage of mass purchasing and unified financial controls. It was becoming common for such department stores (as well as the mail-order houses) to market their own brands of goods, some of which they manufactured and some of which were bought in huge wholesale lots (cosmetics, automobile tires, shirts, etc.).

Chain stores first started in the smaller communities, again to obtain the advantages of wholesale buying and unified financial operations. They began by selling foodstuffs; currently, many of these grocery chains have expanded into supermarkets or one-stop shopping centers, which also sell toilet articles, smaller articles of clothing, cigarettes and toys. Chains have developed in tobacco, automobile parts, soft drinks and foods, etc. Chains have appeared in the limited-price variety field ("five-and-dime" stores); these, too, originated in the U. S.

Such chains were a great boon to national advertisers; increasingly, they are being regarded askance because they sometimes seek to cut fixed prices (using brand articles as loss leaders) and because they are beginning to sell their own products. States started to regulate chains by limiting their numbers; the state and Federal governments also have taken steps to control the resale price of nationally advertised products.

In effect, it will be observed, distribution is closely linked with salesmanship: the activities of the peddler or house-to-house agent; the offering of attractively packaged wares; open-shelf displays of merchandise; the prepackaging of many items from meats to shirts; the willingness to give cash allowances for older models (first begun in the sewing-machine field); the acceptance of the motto that "the customer is always right." The results are mass sales and—despite the heavy costs of distribution through advertising and other promotional devices—declines in prices and improvements in quality. There



is no doubt that the intervention of the middle-man between the producer and the buyer has helped in the quick acceptance of new products and, paradoxically enough, the lowering of prices.

Heavy outlays for advertising, locally and nationally, have aided these processes. Advertising leads to competition among all producers for the consumer's dollar, for, because of it, the consumer today has many choices before him. Advertising encourages quickly the development of new products; and as markets for these appear,

competition among producers occurs—again leading to improvement in price and quality. Advertising affects our habits (personal hygiene) and changes our tastes (style in clothing, home decorations, etc.). The result is that American companies today are spending \$7.8 billion on advertising in our 1,785 newspapers, and in our national magazines and on the radio and television. Direct-mail has become important in retailing in recent years (clothes, household articles) and a growing amount for advertising here is being expended.

## Foreign Trade

**F**OREIGN TRADE is of immense political and economic significance to the U. S., though small relative to our national income. In 1953, exports amounted to 5.1% of our national income, imports to about 3.5%. The dependence of other countries on foreign trade is much greater than our own. In 1952, Belgium depended on exports for 39.3% of its national income, the Netherlands for 46%. In Britain, imports in 1952 amounted to 25.5% of national income, in Norway to over 20%.

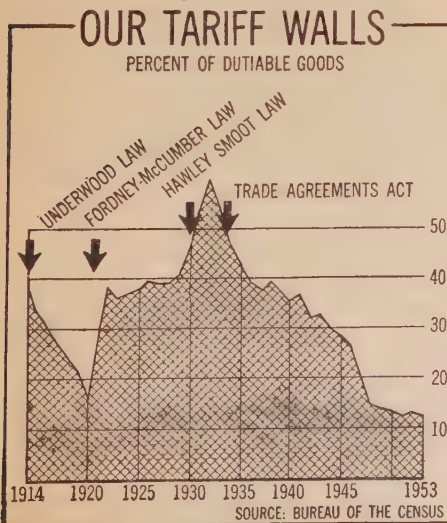
The U. S., the world's largest trader, in 1953 sold exports amounting to \$15.7 billion; imports totaled \$10.8 billion. Our exports were 21% of the world total in 1952, and our imports amounted to 13.7%.

But foreign markets are vital to many important industries. In the crop years 1949–50 to 1951–52, we exported 39% of our rice, 38% of our cotton and 37% of our wheat and flour. We have sold abroad  $\frac{1}{3}$  of our machine tools, each year.

Our protective tariff policy, pursued since 1816, was changed in 1934 with the passage of the Reciprocal Trade Agreements Act, designed to stimulate U. S. exports by seeking greater markets in return for concessions granted to imports. Under it, the President may reduce duties up to 50%. Trade agreements are in effect with 43 countries (see page 801), accounting for 90% of our foreign trade.

Today, the U. S. depends on foreign sources for many materials essential to American industry. Over the past 50 years, this country has shifted from an export to an import position on 4 vitally important industrial materials—petroleum, zinc, copper and lumber. About  $\frac{2}{3}$  of more than 100 mineral materials our industry uses are either wholly or partially imported. Whereas in the 19th century our exports consisted largely of agricultural products and raw materials, our exports are now predominantly manufactured goods. In 1953, manufactured goods made up 64% of our exports. Our imports are principally industrial materials and tropical foods. This explains why manufacturing countries of Western Europe find it difficult to expand their exports and balance their accounts with the U. S.

Since World War II, there has been a



great increase in the importance of Western Hemisphere countries as markets and sources of imports. If American aid shipments are excluded, Latin America was the largest market for U. S. exports in 1953, taking 2.9 billion of American goods. Latin America and Canada supplied more than 50% of our imports in 1953 as compared with 34.7% prewar.

U. S. exports of goods and services in 1953 exceeded imports by \$4.9 billion. Since 1945, the U. S. has supplied goods and services worth \$39 billion more than the foreign goods and services received. More than \$33 billion of this deficit was met by direct U. S. government aid. The rest of the deficit has been met by foreign sales of gold to the U. S. Treasury for dollars, liquidation of dollar investments by foreigners and foreign governments, private and public loans and investments.

To help restore economic balance and check the spread of communism, the U. S. inaugurated the Marshall Plan in 1947—a 4-year program to build up European production to the point where Europe would be on its feet. A similar long-range program for underdeveloped countries was initiated by President Truman in the Point Four program in 1949. The Marshall Plan was instrumental in bringing about marked increases in European production and trade. By the middle of 1953, industrial production in Western Europe had risen 44% over 1948, exports 71%.

Communist aggression forced the free nations to undertake a heavy defense program, which caused new balance-of-payments difficulties. Meanwhile, the emphasis in American aid shifted from economic recovery to defensive security.

The Mutual Security Agency (now the Foreign Operations Administration) succeeded the Economic Cooperation Administration in 1951. The Chart at the top of page 769 shows the shift from non-military to military aid between the years 1946 and 1954.

The dollar shortage has been with us for 40 years. Three basic reasons account for its persistence. First, production is increasing more rapidly in the U. S. than in other countries, building up pressure to develop exports more rapidly than imports. Second, the U. S. has shifted from a debtor position to that of the world's largest creditor. In 1914, the U. S. owed the rest of the world \$3 billion; by 1952, the U. S. was a creditor by about \$16 billion. Third, American trade restrictions, tariffs, quotas on agricultural products, complex customs restrictions and statutes, limit the ability of other nations to develop dollar-earning exports to the U. S.

The tension between the Soviet bloc and the free nations has increased the difficulty of restoring the world's economic balance by driving a wedge between the Soviet economic empire and the world economy. As a result, trade between the free world and the Soviet bloc has been sharply reduced. U. S. exports to the Soviet Union, for example, which amounted to \$149 million in 1947, consisted of slightly more than \$19,000 in 1953. The decline of East-West trade has had serious consequences for many nations of Europe and Asia. Obstacles to trade present a serious problem to the U. S. and our free-world allies. Adjustments for freer trade will have to be worked out if we hope to substitute trade for aid.

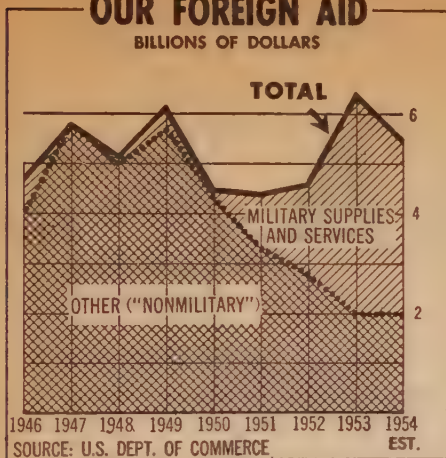
## Boom and Depression

WITH PRODUCTION for a market and the use of money and credit, businessmen's expectations of making profits have risen and fallen. When their outlook is on the optimistic side, businessmen have expanded their activities, launched new enterprises, borrowed from banks; and in the process, they have created new opportunities for employment, increased the

national income and helped raise prices. Sometimes external factors also have produced such an upturn—wars, territorial expansion, a wave of new inventions, the new discovery on a large scale of metals (gold, silver) and minerals (iron, etc.). When their outlook is on the pessimistic side, the reverse has occurred: inventories are kept down, new job opportunities

## OUR FOREIGN AID

BILLIONS OF DOLLARS



dwindle, prices fall, new credit is not sought.

In the last 50 years, close statistical studies have been made of these business fluctuations, and it has been ascertained that they take place in cycles with a well-defined rhythm. These so-called business cycles have 4 phases that follow each other; they are called "recovery," "boom," "recession" and "depression," and the terms are self-explanatory. It has also been demonstrated that there are short cycles, running through the 4 phases in from 4 to 7 years, longer ones running for about 9 years, and long-term or secular ones, running for about 50 years.

The lay public is familiar, at least, with two of the phases, those of boom and depression. During a boom period there is high employment, credit is easy (with interest rates high), prices mount, new companies are started, stock exchanges are active, and buying (frequently on credit) constantly grows. During depression, people are out of work, banks shut down, bankruptcies increase, prices drop, stocks are dumped on the market, credit is tight—in short, hard times.

The U. S. has gone through such eras of boom and bust. It is natural that a new country with sanguine expectations and constantly opening opportunities for investment, and speculation, should have great booms; and that the ensuing periods

of depression also should be very severe. Since the opening of the 19th century, there have been depressions in the following years: 1806-08, 1819-21, 1837-43, 1857-58, 1873-79, 1884-85, 1893-97, 1907, 1920-21 and 1929-39.

It should not be assumed that the effects of these downturns in business and employment have been cumulative; quite the contrary. In every case, after recession there has been a real and frequently a prolonged recovery; and, in fact, taking the long-time history of the country, the trend line has been constantly upward. In other words, we are economically stronger and richer, and have more employment and a better income distribution today than we did in the 1920s, which marked one of the great boom eras in America.

If economists and public authorities knew exactly the forces that caused expansion and contraction, they could control them, and our economy always would be on an even keel. There are many general theories for the business cycle: overproduction, underconsumption, inadequate monetary and fiscal supply and controls. Even weather has been offered as an explanation. Enough for us to note here is that our current knowledge of business activity, or the cycle, is quite good. We know what particular aspects of business are leaders in starting expansion and, too, in ushering in contraction. Also, we have learned from the experiences of the 1930s that government can play an important part in holding back runaway booms and checking continued recession.

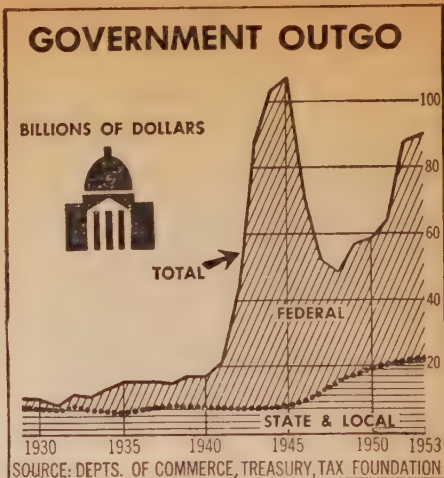
Government has always helped business directly or indirectly, sometimes very significantly, sometimes only slightly. In the very first decade of America's existence as a republic, patents were granted, a tariff law was passed and a central bank was chartered by Congress. These were examples of indirect aid. Moreover, when an industry essential to the public good was not profitable enough to attract capital, our government furnished the money, or its equivalent in land or contracts, in order to stimulate its growth. The states, during 1820-40, either built themselves



or made grants or loans to companies constructing the early canals and railroads of the U. S. Before the Civil War, the government had begun the payment of subsidies to shipping companies operating in the North Atlantic trade. The great trans-Mississippi railroads, in the 1860s and 1870s, were made possible only because the Federal government lent them money and gave the companies great grants from the public domain. In fact, these railroads were land companies before engaging in transportation.

The whole process of government assistance, by government-owned corporations, by loans, or by price-support devices, was accelerated during the 1930s and 1940s. The depression confronted us with problems that called for emergency measures as well as a program to prevent recurrence. Only the Federal government had the power and resources to meet a challenge of such scope. It met the challenge by putting into effect such emergency measures as the RFC and bank holiday, the NRA to restore business, the AAA to handle farm surpluses and prices, and the CCC and WPA to meet the acute problem of unemployment. Of a more permanent nature were those measures which undertook to furnish safeguards for the future by social legislation, government development of power resources, financial regulations and protection for farmers and laborers. Social Security, TVA and other power projects, the SEC, and labor legislation such as the Wagner Act and Minimum Wage Laws, were some of the means by which these ends were achieved. As new problems arose in the years that followed, similar legislation was designed to solve them. Such were the veterans' benefit laws and public housing. When we realize that from June 1951 to June 1952, Federal, state and local governments paid out over \$14.8 billion in social insurance and related programs, it becomes clear that this constitutes a considerable prop to the buying power of the American consumer.

It is proper, therefore, for us to say that short of the sudden appearance of extraordinary external factors, we know how to stabilize our economy. The fear



of long-time depression need no longer beset us. There is a broader and fairer distribution of income among individuals and economic groups. Our tax system is capable of automatic adjustment to changes in business conditions. Central-banking controls more sensitively manage the flow of money and credit. Security exchanges and the banks themselves are better protected against shocks. Individuals have a large reserve of savings to carry them over short periods of recession. There are great funds in our social-security system and in the welfare accounts of trade unions. Farm price supports maintain agriculture income at high levels. There is a greater firmness of wage rates, due in part to strong unions and in greater part, to the continuing increase in productivity of the workers. There are more enlightened business practices with respect to pricing, marketing, inventories, collective bargaining and investment planning. There is a high level of public expenditures, which stabilizes demand and stimulates private investment.

The inventory depression of 1953-54 seems to have run its course. By the summer of 1954—without major governmental intervention—the economy once more was going ahead full-steam, the construction industry leading. The year 1954 promised to be only second to 1953 as America's most prosperous year.

## Government Income, Government Spending

THE FEDERAL government of the U. S. started out with a public debt, incurred by the Confederation and the states in fighting the Revolutionary War. It was quite heavy, almost \$20 per person. Once in our history we had no public debt—during 1835-36. During the Civil War years the debt again mounted, reaching its peak for that era in 1866 when the debt was \$2.7 billion or \$75.42 per person. In 1914, the debt was not more than \$1 billion, and its per capita was \$12.

World War I saw an extraordinary increase in the public debt, for more than  $\frac{2}{3}$  of the war's cost was met from loans. In 1919, the national debt was at \$25 billion (\$242 per capita); by 1930, it had been brought down to \$16 billion (\$131 per capita). This was the end of the era of small debt, for the New Deal frankly embarked on a program of deficit financing in order, through government expenditures, to stimulate private investment and, therefore, employment. This was called "pump priming." The New Deal argued along two lines. First, government budgets did not have to balance annually. It was proper to increase debt when times were out of joint and decrease it when employment was high and business booming. Second, a public debt was not burdensome as long as national income was moving upward. Against this position, it was being pointed out that additions to government debt constituted a powerful inflationary force; and that once government took on additional services (during recession), it was difficult (during recovery) to divest itself of them.

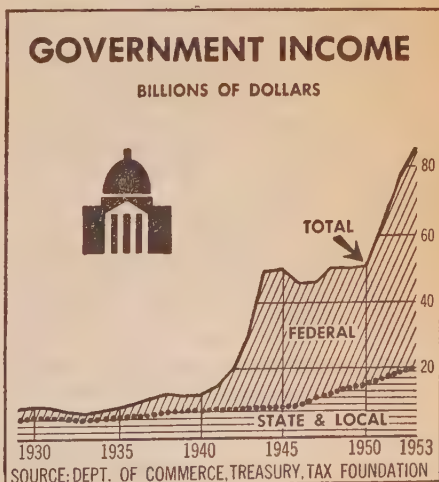
In any event, the New Deal increased the national debt from \$19 billion in 1932 to \$49 billion in 1941. And with American entry into World War II, the debt went up to \$258.7 billion in 1945 and to \$273 billion in 1954 (about \$1,688 per capita).

By the same token, Federal expenditures have risen. In 1789, the Federal government spent annually a little more than \$4 million; the country's first billion-dollar budget (leaving out the Civil War) was in 1917, when total expenditures were \$2 billion. In 1945, expenditures

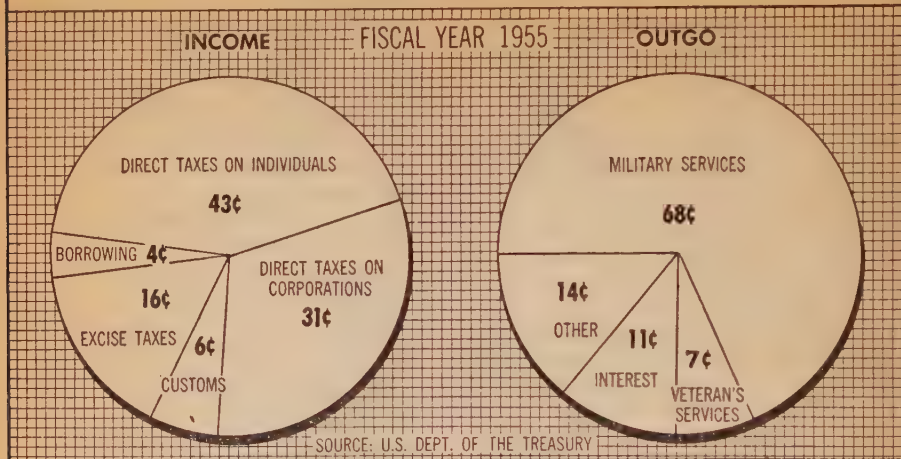
were \$98.7 billion; for 1953, \$74.6 billion. In 1953, these were the major classes of expenditures in the Federal budget: major national security programs, \$52.8 billion; Veterans' Administration, \$4.2 billion; interest on public debt, \$6.5 billion; all others, \$11.1 billion.

In the beginning the Federal government relied on customs duties, internal revenue (tobacco and liquor taxes), and sales of public lands for its receipts. By 1900, the first two were about equaling each other and the last had almost disappeared. The introduction of Federal income taxes (authorized in 1913) sharply changed the picture. By 1920, income and profit taxes were producing more than half of the total receipts. In 1945, when Federal receipts stood at \$47.8 billion, income and profit taxes brought in \$35.2 billion. (For 1953 the figures for the two items were \$72.4 billion and \$54.1 billion.)

Why do governments today spend so much? Obviously, war and defense make the heaviest demands on the public purse (here, too, should be added the recent heavy outlays for international aid in grants and loans). Increases in population, in urbanization and (more important) in standards of living, force governments to spend more on health, education, highways and streets, flood control and the



## THE BUDGET DOLLAR



like. We are more humane, or benevolent, in our attitudes. We yield before all sorts of pressure groups which make claims on governments. And we must not fail to note the increase in prices, or inflation, and its effects on government spending. When all is said and done, however, government purchases of goods and services

constitute a growing part of the gross national product or expenditure. In 1929, such government outlays made up less than 10% of the gross national product; in 1940, 14%; in 1953, 23%. On the other hand, a powerful stabilizing force in our economy is to be found in this very fact of government expenditures.

### Banking and Finance

**T**HE ECONOMIC engine which the American economy represents can function only if credit is easily available—long-term credit to finance new enterprises or make possible new installations, and short-term credit as working capital. Banks largely furnish the latter; the investment market (through the sale of stocks and bonds) largely provides the former.

Most transactions by business and by individuals take place on paper without cash ever changing hands. A bank or financial institution may do millions of dollars worth of business each day and yet at the end of that day exchange only a few thousand dollars to settle accounts. As a result, the amount of control which government exercises over credit and banking today is far more important than any use of the printing press to create currency. This control is exercised through

so-called "central banks" which are created by governments, but as a rule are privately managed. It was not until the passage of the Federal Reserve Act of 1913 that the U. S. was finally committed to the idea of central banking.

The Federal Reserve System functions through 12 Federal Reserve Banks located in different parts of the country. Each Reserve Bank is owned by the local banks of that district which join the Federal Reserve System. While the Federal Reserve Banks are privately owned and operated, they are regulated by a Board of Governors of 7, appointed by the President of the U. S. Policy is determined by this Board acting broadly in terms of its powers as defined by statute. Each Federal Reserve Bank functions as a bank for the government and as a "banker's bank," serving its member banks in the same way



as your bank serves you. Each member must deposit a certain percentage of its deposits as a reserve with its Reserve Bank. These reserves constitute a pool of credit available to the member banks and, through them, to business. Just as business and individuals go to their banks when they need money and put up collateral to secure a loan, so commercial banks go to their Federal Reserve Banks to obtain additional reserves. This is done by borrowing from the System against collateral or by rediscounting commercial paper. The additional funds thus obtained, in turn become available for loans.

The Federal Reserve System has the power to regulate our economy by acting as a brake or an accelerator on credit. It does this in a number of ways:

1. It may raise the minimum reserve that member banks must deposit with their Reserve Banks. In that case, the commercial bank has less to lend to its clients, and credit grows tight. Or it may lower the minimum, in which case credit is easier to obtain.

2. It may buy or sell U. S. bonds. If it buys, the money it pays finds its way into commercial banks where it becomes available as credit. If it sells, the money has to come ultimately from the commercial banks, in which case credit grows tight.

3. It may increase the discount rate that member banks must pay for loans. This rate is then passed along by the commercial banks to their clients, who find money has become dearer. Or the reverse may be done, and credit grows easier.

4. It may discourage the purchase of securities by raising the margin requirements, or encourage it by lowering these requirements.

These are some of the methods which cause the money supply and credit to expand or contract, thus imposing a check on dangerous booms and strengthening the economy when recession threatens. This is one of the ways government helps keep the system of private enterprise adjusted sensitively.

Long-term capital is furnished by other means. We seldom realize that the cap-

ital to carry out our economic expansion comes from all of us. The tremendous growth which America has experienced over the past two decades could be financed only if we as individuals or the companies of America were willing to put aside part of our current income in the form of savings as investments in these growing enterprises. Most of these funds are channeled into business through banks, life insurance companies and savings and loan associations, which invest depositors' money. However, investments may be made directly, by starting or "buying into" an existing business or by purchasing stocks and bonds. Also, companies plough back part of their earnings into new plants and improvements.

Both bonds and stocks have been gaining in popularity as an investment medium, even with the average American with very limited amounts at his disposal. The first securities were traded by a small group of stock brokers at the foot of Wall Street shortly after the American Revolution—6% government bonds issued to fund the revolutionary debt. Today on the New York Stock Exchange, shares in the roughly 1,500 companies listed there are held by millions of American shareholders, according to latest estimates. And, of course, there are other exchanges such as the American Stock Exchange. The issues of hundreds of other companies are traded in an informal way without the use of any exchanges.

This steadily expanding participation of millions of individual Americans in financing the growth of American business through the media of life insurance, individual savings and stock ownership is, of course, one of the most hopeful signs in recent years, because it gives the individual American family a direct and immediate stake in the economic fortune and future of this country.

It is a well known fact that stock prices, even in periods of relative stability, fluctuate in a broad range. This instability of stock prices is an important deterrent to the small investor, who is primarily interested in the preservation of the capital value of his investment

The collapse of the stock market prices in October 1929 ushered in the Great Depression, and the question has been raised as to whether another collapse of security values might not again signal the start of a new depression.

A number of significant safeguards have been developed since the collapse of 1929 for the protection of the investor. New issues of corporate securities must comply with the rules laid down by the Securities and Exchange Commission to prevent any

statements which might mislead the public. The Commission also regulates trading on the exchanges themselves to prevent abuses such as rigging of prices, etc. Finally, most stock purchases are being made for investment purposes rather than on a thin speculative margin as they were in 1929. At present, as has been said, the Federal Reserve System's Board of Governors has the power to prescribe the margins for trading in corporate securities, which would prevent that. The policy is to keep margins relatively high, from 50% to 75%.

## Economic Organizations

### Labor

**I**N 1869 there appeared the first major national labor organization, the Knights of Labor, which at its peak numbered 700,000 members. Formation of the AFL under the leadership of Samuel Gompers in 1886 marked the beginning of a permanent national labor movement. The development of a nation-wide labor organization represented the strategy of labor in its dealings with a nation-wide industrial and corporate development.

The AFL took root in an era marked by public and government antagonism toward organized labor. This attitude was reflected in the yellow-dog contract and the labor injunction. However, there were those who felt that these devices left labor defenseless. The Clayton Antitrust Law (1914), which expressly exempted labor from antitrust regulations, was an attempt to give labor a fairer status. Loopholes in the law necessitated the passage of the Norris-La Guardia Law (1932), which prohibited yellow-dog contracts and limited labor injunctions. The National Industrial Recovery Act in 1933 and the Wagner Act in 1935 guaranteed workers the right to form unions, bargain collectively and engage in strikes, and prohibited unfair practices by employers. Other laws guaranteed minimum wages and maximum hours of labor and virtually outlawed child labor, while the Social Security Act of 1935 provided public employment exchanges, unemployment compensation and retirement benefits for workers.

In 1947, the Taft-Hartley Law was passed by Congress in spite of the opposition of organized labor. This law prohibits the closed shop (but permits the union shop), provides an 80-day cooling-off period in labor disputes in essential industries, requires a non-Communist oath of all labor officials, prohibits certain union practices as unfair ("featherbedding," sympathetic strikes, unreasonable initiation fees), limits other union practices (check-off, disciplining of union members), and outlaws secondary boycotts and jurisdictional strikes.

In 1935, a deep-seated conflict arose in the AFL over the issue of craft versus industrial unionism. The AFL traditionally had organized along craft lines. Leaders of the industrial unions in the AFL proposed a vigorous organizing drive and chartering of industrial unions in the mass-production industries. The craft union leaders, who dominated the AFL, were unconditionally opposed. Finally in 1938, leaders of 8 AFL unions, headed by John L. Lewis, established a rival federation, the Congress of Industrial Organizations, set up on industrial lines.

Today the labor movement numbers some 17 million. The AFL remains dominant, with 111 national unions estimated to include 8.6 million members. The CIO, with 35 national unions, has an estimated membership of about 5.5 million. About 2½ million workers are organized in independent unions, among which the Railroad Brotherhoods and the United Mine Workers are the most important. There

## Membership of Leading American Labor Unions

Source: Bureau of Labor Statistics and Questionnaires to the Unions.

Name of Union	Affiliation	No. of Members	Year
Amalgamated Clothing Workers.....	CIO	400,000	1954
Amalgamated Meat Cutters and Butcher Workmen.....	AFL	195,000	1952
American Federation of Musicians.....	AFL	248,078	1954
Brotherhood of Locomotive Firemen and Enginemen.....	Ind.	90,000	1952
Brotherhood of Maintenance of Way Employees.....	AFL	182,831	1952
Brotherhood of Painters, Decorators and Paperhangers.....	AFL	220,000	1954
Brotherhood of Railroad Trainmen.....	Ind.	213,285	1954
Brotherhood of Railway and Steamship Clerks.....	AFL	346,443	1954
Building Service Employees' International Union.....	AFL	185,000	1952
Communications Workers of America.....	CIO	300,000	1954
Hotel & Restaurant Employees' International Alliance.....	AFL	402,000	1952
International Association of Machinists.....	AFL	900,000	1954
International Brotherhood of Boilermakers.....	AFL	150,000	1952
International Brotherhood of Electrical Workers.....	AFL	500,000	1952
International Brotherhood of Pulp, Sulphite and Papermill Workers.....	AFL	148,853	1953
International Brotherhood of Teamsters.....	AFL	1,300,000	1954
International Hod Carriers', Building and Common Laborers' Union.....	AFL	368,000	1952
International Ladies' Garment Workers' Union.....	AFL	439,277	1954
International Union of Mine, Mill and Smelter Workers.....	Ind.	90,000	1952
International Union of Electrical, Radio & Machine Workers.....	CIO	250,000	1952
International Union of Operating Engineers.....	AFL	187,180	1952
Oilworkers' International Union.....	CIO	106,935	1954
Retail Clerks.....	AFL	250,000	1952
United Association of Plumbers and Steam Fitters.....	AFL	240,000	1954
United Automobile, Aircraft & Agricultural Implement Workers.....	CIO	1,500,000	1954
United Brotherhood of Carpenters and Joiners.....	AFL	810,638	1954
United Electrical, Radio and Machine Workers.....	Ind.	150,000	1952
United Mine Workers.....	Ind.	800,000	1954
United Rubber, Cork, Linoleum and Plastic Workers.....	CIO	185,988	1954
United Steelworkers.....	CIO	1,185,000	1954

are about 2 million members of company or quasi-independent unions. CIO unions are concentrated for the most part in the heavy-goods, mass-production industries, while the AFL unions are dominant in most sectors of the economy.

Over most of its history the labor movement has been concerned almost entirely with wages and hours as economic ends. In recent years, however, the collective labor agreement has come to include provisions covering a multitude of fringe benefits: health, welfare and pension plans, paid holidays, vacations, sick leave, job evaluation and merit rating systems and, more recently, the guaranteed annual wage.

### Other Organizations

LABOR, of course, has not been the only group organized for its self-interest. Employers and the professions, too, have

their bodies, and these are quite old. New York's Chamber of Commerce, for example, was founded in 1768; the National Association of Manufacturers in 1895.

The trade association (or institute) is the characteristic organization, and there are at least 3,000 such national bodies in the U. S. They permit employers in the same industry or members of the same profession to consult on and establish general programs for matters of common concern. Customary activities include joint research and "institutional" advertising, public relations, the maintenance of quality standards and practices, the dissemination of credit information, and the like. The largest ones have representatives in Washington where "lobbying" takes place to advance the industry (tariffs) and protect it against discriminatory legislation (taxation).



As in the case of all articulate groups, we may draw up a balance sheet of assets and liabilities. Trade associations have helped in popularizing the uses of their products and in pushing standardization of parts and products. The whole economy has benefited. But trade associations may seek to weaken competition by many devices—exchange of price information, a common base for fixing costs—and to this extent the economy is hurt. Earlier in their history, trade associations largely supported tariff legislation and fought trade unions.

Two overall bodies also exist—the United States Chamber of Commerce, to which belong 2,300 local chambers, 540 national and local associations and some 20,000 individual members; and the National Association of Manufacturers, to which belong some 350 national and local associations with an estimated membership of 15,000 firms. The first puts its emphasis on trade, the second on industry. The fact is, however, that both seek to inform the American public as to the nature of our economy and help to shape public policy on such

matters as taxation, government outlays, foreign trade and the like.

Agriculture, as well, has its national spokesmen, which have central organizations, local chapters and Washington offices. They inform; they collect data on matters of common concern; and they seek to influence legislation in the interest of the farmers. There are 3 large general farm groups. The oldest is the National Grange, founded in 1867, which has an estimated membership of 800,000. The National Farmers Union was formed in 1902, and its membership is some 500,000 farm families. The American Farm Bureau Federation, set up in 1919, claims about 1,250,000 farm families as members.

During the 1930s, all the farmer bodies grew, and they all rallied behind New Deal agricultural legislation. Latterly, a division among them has occurred: the Farmers Union (made up largely of lower-income farmers from the Northwest) continues to support parity, in fact at 100%; the Bureau Federation and the Grange are against high fixed supports.

## Leading Countries in Various Riches and Resources

Source: *Encyclopaedia Britannica*.

The designation "nd" means that no data are available. In such cases, the relative rank of the nation is estimated.

### Mineral and Metal Production

#### ANTIMONY ORE (thousands of short tons, 1952)

1. Bolivia .....	10.8
2. China .....	8.8 <sup>1</sup>
3. U. of S. Africa .....	7.9
4. Mexico .....	6.1
5. Yugoslavia .....	3.0 <sup>1</sup>
6. Czechoslovakia .....	2.2 <sup>2</sup>
7. United States .....	2.2
8. Turkey .....	1.5
9. Algeria .....	1.5
10. Canada .....	1.2

<sup>1</sup> Estimate. <sup>2</sup> 1950 estimate.

#### BAUXITE (thousands of short tons, 1952)

1. Surinam .....	3,469
2. British Guiana .....	2,669
3. United States .....	1,863
4. France .....	1,227
5. Yugoslavia .....	635
6. Indonesia .....	617
7. Hungary .....	594 <sup>1</sup>
8. U.S.S.R. ....	560 <sup>2</sup>

9. Greece .....	383
10. Italy .....	310

<sup>1</sup> 1951. <sup>2</sup> 1950.

#### CHROMITE (thousands of short tons, 1952)

1. Turkey .....	700
2. U.S.S.R. ....	650 <sup>1</sup>
3. U. of S. Africa .....	638
4. Philippines .....	598
5. So. Rhodesia .....	355
6. New Caledonia .....	118
7. Yugoslavia .....	118
8. Cuba .....	61
9. Japan .....	52
10. Greece .....	32

<sup>1</sup> Estimate.

#### COAL (millions of short tons, 1953)

1. United States .....	482 <sup>1</sup>
2. U.S.S.R. ....	350 <sup>2</sup>
3. United Kingdom .....	250 <sup>3</sup>
4. West Germany .....	137

5. Poland .....	97
6. France .....	76 <sup>4</sup>
7. China .....	56 <sup>5</sup>
8. Czechoslovakia .....	53 <sup>6</sup>
9. Japan .....	51
10. India .....	40

<sup>1</sup> Including lignite. <sup>2</sup> Estimate, including lignite. <sup>3</sup> Excluding Northern Ireland. <sup>4</sup> Including Saar. <sup>5</sup> 1952 estimate. <sup>6</sup> 1952.

#### COPPER (thousands of short tons, smelter, 1953)

1. United States .....	1,066 <sup>1</sup>
2. No. Rhodesia .....	405
3. Chile .....	371
4. U.S.S.R. ....	325 <sup>2</sup>
5. Canada .....	235 <sup>3</sup>
6. Belgian Congo .....	235
7. West Germany .....	230 <sup>1</sup>
8. United Kingdom .....	206 <sup>4</sup>
9. Belgium .....	165 <sup>5</sup>
10. Japan .....	100 <sup>5</sup>

<sup>1</sup> Including secondary copper. <sup>2</sup> 1952 estimate. <sup>3</sup> Refined copper. <sup>4</sup> Almost all secondary copper. <sup>5</sup> Secondary and refined copper.

**GOLD** (thousands of fine oz., refinery production, 1952)

1. U. of S. Africa	11,819
2. U.S.S.R.	10,000 <sup>1</sup>
3. Canada	4,470
4. United States	1,927
5. Australia	980
6. Gold Coast	715
7. So. Rhodesia	497
8. Philippines	469
9. Mexico	459
10. Colombia	422

<sup>1</sup> Estimate.**IRON ORE** (millions of short tons, 1953)

1. United States	133.2
2. U.S.S.R.	55.0 <sup>1</sup>
3. France	46.6
4. Sweden	18.8
5. United Kingdom	17.7
6. West Germany	16.1
7. Luxemburg	7.9
8. Canada	6.4 <sup>2</sup>
9. India	4.0
10. Algeria	3.7

<sup>1</sup> 1952 estimate. <sup>2</sup> Shipments only.**LEAD** (thousands of short tons, refined, 1953)

1. United States	529.2
2. Mexico	244.2 <sup>1</sup>
3. Australia	233.6
4. U.S.S.R.	170.0 <sup>2</sup>
5. Canada	165.0
6. West Germany	118.8 <sup>3</sup>
7. Belgium	84.0
8. United Kingdom	82.5 <sup>3</sup>
9. France	81.2 <sup>4</sup>
10. Yugoslavia	77.9 <sup>3</sup>

<sup>1</sup> Lead content of ores mined. <sup>2</sup> 1952 estimate. <sup>3</sup> Smelter production. <sup>4</sup> Smelter production including secondary lead.**MANGANESE ORE** (thousands of short tons, 1952)

1. U.S.S.R.	2,800 <sup>1</sup>
2. India	1,420
3. U. of S. Africa	962
4. Gold Coast	874
5. French Morocco	468
6. Cuba	267
7. Egypt	230
8. Japan	200 <sup>1</sup>
9. Brazil	176
10. Belgian Congo	165 <sup>1</sup>

<sup>1</sup> Estimate.**PETROLEUM, CRUDE** (millions of bbls., 1953)

1. United States	2,320
2. Venezuela	644
3. U.S.S.R.	375 <sup>1</sup>
4. Kuwait	315
5. Saudi Arabia	300
6. Iraq	198
7. Canada	81
8. Indonesia	74
9. Mexico	73
10. Rumania	69

<sup>1</sup> Estimate.**PIG IRON AND FERRO-ALLOYS** (millions of short tons, 1953)

1. United States	75.7 <sup>1</sup>
2. U.S.S.R.	27.5 <sup>2</sup>
3. West Germany	12.8
4. United Kingdom	12.5 <sup>1</sup>
5. France <sup>3</sup>	12.2 <sup>1</sup>
6. Japan	5.1
7. Belgium	4.6
8. Czechoslovakia	3.3 <sup>2</sup>
9. Canada	3.2
10. Luxemburg	3.0

<sup>1</sup> Excluding production of ferro-alloys in electric furnaces. <sup>2</sup> Pig iron only; 1952 estimate. <sup>3</sup> Including Saar.**SILVER** (millions of fine oz., 1952)

1. Mexico	50.4
2. United States	39.8
3. Canada	25.2
4. U.S.S.R.	24.0 <sup>1</sup>
5. Peru	19.2
6. Australia	11.3
7. Bolivia	7.1
8. Japan	5.3
9. Belgian Congo	4.7
10. Honduras	3.7

<sup>1</sup> Estimate.**TIN ORE** (thousands of short tons, 1952)

1. Malaya	63.7
2. Indonesia	39.2
3. Bolivia	35.8
4. Belgian Congo	15.5
5. Thailand	10.6
6. U.S.S.R.	nd
7. China	9.6 <sup>1</sup>
8. Nigeria	9.3
9. Australia	1.7
10. Burma	1.2

<sup>1</sup> Estimate.**URANIUM**No production data are available.<sup>1</sup><sup>1</sup> The most important deposits are probably in the Belgian Congo and in the Northwest Territories, Canada. Deposits have also been found or reported in Alaska, Australia, Bolivia, Brazil, Bulgaria, Burma, Ceylon, Chile, China (Manchuria), Czechoslovakia, England, Ethiopia, Finland, France, Germany, Greenland, Hungary, India, Indonesia, Iran, Madagascar, Mexico, Mozambique, Nigeria, Norway, Panamá, Philippines, Portugal, Sardinia, South Africa, Spain, Sweden, U.S.S.R., United States (especially Colorado plateau area of Colorado, New Mexico, Arizona and Utah), and Yugoslavia.**ZINC** (thousands of short tons, smelter, 1953)

1. United States	990 <sup>1</sup>
2. Canada	247 <sup>2</sup>
3. Belgium	213 <sup>1</sup>
4. U.S.S.R.	204 <sup>3</sup>
5. West Germany	183 <sup>1</sup>
6. France	106 <sup>1</sup>
7. Poland	105 <sup>3</sup>
8. Australia	101

9. Japan	87 <sup>4</sup>
10. United Kingdom	81

<sup>1</sup> Including secondary zinc. <sup>2</sup> Refined zinc. <sup>3</sup> 1952 estimate. <sup>4</sup> Including secondary and refined zinc.**Agriculture****BARLEY** (thousands of short tons, 1953)

1. U.S.S.R.	7,800 <sup>1</sup>
2. China	7,700 <sup>2</sup>
3. Canada	6,300
4. United States	5,800
5. Turkey	3,900
6. India	3,000
7. United Kingdom	2,700
8. France	2,500
9. Denmark	2,400
10. Japan	2,300

<sup>1</sup> 1950. <sup>2</sup> 1952; 22 provinces.**BUTTER** (thousands of short tons, factory production, 1953)

1. United States	711
2. U.S.S.R.	440 <sup>1</sup>
3. West Germany	304
4. France	303 <sup>2</sup>
5. New Zealand	224 <sup>3</sup>
6. Denmark	191
7. Australia	184 <sup>3</sup>
8. Canada	151
9. Sweden	108
10. Netherlands	91

<sup>1</sup> Estimate. <sup>2</sup> 1951. <sup>3</sup> Year ending June 30, 1953.**CATTLE** (number in millions, various dates)

1. India	150.3 <sup>1</sup>
2. United States	93.7 <sup>2</sup>
3. U.S.S.R.	56.6 <sup>2</sup>
4. Brazil	56.0 <sup>2</sup>
5. Argentina	45.3 <sup>1</sup>
6. Pakistan	24.3 <sup>3</sup>
7. Ethiopia	18.0 <sup>1</sup>
8. China	nd
9. France	16.3 <sup>1</sup>
10. Colombia	15.5 <sup>4</sup>

<sup>1</sup> 1952. <sup>2</sup> 1953. <sup>3</sup> 1951. <sup>4</sup> 1950.**CHEESE** (thousands of short tons, factory, 1953)

1. United States	648
2. France	320 <sup>1</sup>
3. Italy	315 <sup>1</sup>
4. U.S.S.R.	nd
5. West Germany	177
6. Netherlands	172 <sup>2</sup>
7. New Zealand	120 <sup>3</sup>
8. Argentina	116
9. United Kingdom	96
10. East Germany	nd

<sup>1</sup> 1952; including farm production. <sup>2</sup> Including farm production. <sup>3</sup> Year ending June 30, 1953.**COTTON, GINNED** (thousands of bales, 500 lb. gross, 1953)

1. U.S.S.R.	16,800 <sup>1</sup>
2. United States	16,100

3. India .....	3,200
4. China .....	2,800 <sup>2</sup>
5. Brazil .....	1,600 <sup>2</sup>
6. Egypt .....	1,400
7. Pakistan .....	1,400
8. Mexico .....	1,100
9. Turkey .....	643
10. Argentina .....	575 <sup>2</sup>

<sup>1</sup> 1950. <sup>2</sup> 1952.

#### FORESTS (millions of acres, latest data available)<sup>1</sup>

1. U.S.S.R. ....	2,275
2. Brazil .....	975
3. Canada .....	835
4. United States .....	825 <sup>2</sup>
5. Fr. West Africa .....	420
6. Fr. Eq. Africa .....	340 <sup>3</sup>
7. Indonesia .....	300
8. Belgian Congo .....	250
9. Anglo-Egy. Sudan ..	225
10. China .....	210

<sup>1</sup> Of present or potential value.  
<sup>2</sup> Including Alaska. <sup>3</sup> Including savannah.

#### HOGS (number in million, various dates)

1. United States .....	54.6 <sup>1</sup>
2. China .....	nd
3. Brazil .....	31.0 <sup>1</sup>
4. U.S.S.R. ....	28.5 <sup>1</sup>
5. West Germany .....	13.6 <sup>2</sup>
6. Poland .....	9.9 <sup>3</sup>
7. East Germany .....	8.8 <sup>1</sup>
8. France .....	7.2 <sup>2</sup>
9. Mexico .....	6.0 <sup>4</sup>
10. Canada .....	5.5 <sup>4</sup>

<sup>1</sup> 1953. <sup>2</sup> 1952. <sup>3</sup> 1950. <sup>4</sup> 1951.

#### HORSES (number in millions, various dates)

1. U.S.S.R. ....	15.3 <sup>1</sup>
2. Argentina .....	7.3 <sup>2</sup>
3. Brazil .....	7.1 <sup>1</sup>
4. United States .....	3.9 <sup>1</sup>
5. Mexico .....	2.9 <sup>3</sup>
6. Poland .....	2.7 <sup>4</sup>
7. France .....	2.4 <sup>5</sup>
8. China .....	nd
9. India .....	1.5 <sup>3</sup>
10. West Germany .....	1.4 <sup>5</sup>

<sup>1</sup> 1953. <sup>2</sup> 1951. <sup>3</sup> 1950. <sup>4</sup> 1952-53. <sup>5</sup> 1952.

#### LAND, ARABLE (millions of ac., including orchards, latest data available, 1954)

1. U.S.S.R. ....	555
2. United States .....	455
3. India .....	325 <sup>1</sup>
4. China .....	250
5. Belgian Congo .....	120 <sup>2</sup>
6. Canada .....	97
7. Argentina .....	75
8. Fr. Eq. Africa .....	74
9. France .....	52
10. Pakistan .....	50

<sup>1</sup> Including Kashmir. <sup>2</sup> Including inland water.

#### MEAT (thousands of short tons, 1953)<sup>1</sup>

1. United States .....	11,590
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2. Argentina .....	2,400 <sup>2</sup>
3. U.S.S.R. ....	nd
4. France .....	2,140 <sup>2</sup>
5. West Germany .....	1,800
6. United Kingdom .....	1,550
7. Brazil .....	1,520 <sup>2</sup>
8. Poland .....	1,375 <sup>3</sup>
9. Australia .....	1,290 <sup>4</sup>
10. Canada .....	730 <sup>5</sup>

<sup>1</sup> Chiefly beef, veal, mutton, lamb and pork produced in slaughtering houses or packing plants. <sup>2</sup> 1952. <sup>3</sup> 1950. <sup>4</sup> Including farm slaughter year ending June 30, 1953. <sup>5</sup> Inspected slaughter only.

#### MILK (millions of U. S. gal., 1953)

1. United States .....	14,500
2. U.S.S.R. ....	nd
3. West Germany .....	4,450
4. France .....	4,000 <sup>1</sup>
5. United Kingdom .....	2,400 <sup>2</sup>
6. Canada .....	1,970
7. Australia .....	1,520 <sup>3</sup>
8. Denmark .....	1,425
9. New Zealand .....	1,300 <sup>1</sup>
10. Netherlands .....	1,280 <sup>4</sup>

<sup>1</sup> 1952. <sup>2</sup> Milk sold through Milk Marketing Schemes. <sup>3</sup> Year ending June 30, 1953. <sup>4</sup> Delivered by farmers.

#### OATS (thousands of short tons, 1953)

1. United States .....	19,400
2. U.S.S.R. ....	nd
3. Canada .....	6,900
4. France .....	3,900
5. United Kingdom .....	3,000
6. West Germany .....	2,800
7. Poland .....	2,300 <sup>1</sup>
8. Argentina .....	1,400 <sup>2</sup>
9. East Germany .....	1,250 <sup>1</sup>
10. Czechoslovakia .....	1,050 <sup>3</sup>

<sup>1</sup> 1950. <sup>2</sup> 1952. <sup>3</sup> 1951.

#### POTATOES (millions of bushels, 1953)

1. U.S.S.R. ....	2,750
2. Poland .....	975 <sup>1</sup>
3. West Germany .....	955
4. France .....	522
5. East Germany .....	400 <sup>1</sup>
6. United States .....	375
7. United Kingdom .....	300
8. Czechoslovakia .....	240 <sup>1</sup>
9. Netherlands .....	160 <sup>2</sup>
10. Spain .....	135 <sup>2</sup>

<sup>1</sup> 1951. <sup>2</sup> 1952.

#### RICE (thousands of short tons, 1953-54 season)

1. China .....	52,000 <sup>1</sup>
2. India .....	41,000
3. Indonesia .....	15,600
4. Pakistan .....	14,000
5. Japan .....	11,000
6. Thailand .....	8,500
7. Burma .....	7,200
8. Indo-China .....	6,800
9. Philippines .....	3,500 <sup>2</sup>
10. South Korea .....	3,400 <sup>3</sup>

<sup>1</sup> 1952-53. <sup>2</sup> 1953. <sup>3</sup> 1954.

#### RUBBER (thousands of short tons, 1953)

1. United States .....	948 <sup>1</sup>
2. Indonesia .....	780
3. Malaya .....	640
4. U.S.S.R. ....	275 <sup>2</sup>
5. Ceylon .....	110
6. Thailand .....	107 <sup>3</sup>
7. Canada .....	90 <sup>1</sup>
8. Indo-China .....	80
9. Liberia .....	38 <sup>3</sup>
10. Sarawak .....	27

<sup>1</sup> Synthetic only. <sup>2</sup> 1951; synthetic only. <sup>3</sup> Exports.

#### SHEEP (number in millions, various dates)

1. Australia .....	123.0 <sup>1</sup>
2. U.S.S.R. ....	93.0 <sup>1</sup>
3. Argentina .....	54.7 <sup>2</sup>
4. India .....	40.0 <sup>3</sup>
5. New Zealand .....	36.2 <sup>1</sup>
6. U. of S. Africa .....	34.8 <sup>3</sup>
7. United States .....	31.6 <sup>1</sup>
8. Turkey .....	25.8 <sup>2</sup>
9. Uruguay .....	23.4 <sup>3</sup>
10. United Kingdom .....	22.5 <sup>1</sup>

<sup>1</sup> 1953. <sup>2</sup> 1952. <sup>3</sup> 1951.

#### SUGAR (thousands of short tons, centrifugal production of beet and cane, 1953-54)

1. Cuba .....	5,680
2. U.S.S.R. ....	2,500
3. United States .....	2,310
4. Brazil .....	2,100
5. France .....	1,715
6. India .....	1,700
7. Philippines .....	1,320
8. West Germany .....	1,286
9. Puerto Rico .....	1,211
10. Hawaii .....	1,052

#### WHEAT (millions of bushels, 1953)

1. United States .....	1,165
2. U.S.S.R. ....	1,110 <sup>1</sup>
3. China .....	797 <sup>2</sup>
4. Canada .....	614
5. Italy .....	323
6. France .....	317
7. Argentina .....	287
8. Turkey .....	276
9. India .....	252
10. Australia .....	193 <sup>3</sup>

<sup>1</sup> 1950. <sup>2</sup> 1952; 22 provinces. <sup>3</sup> 1952.

#### WOOL (thousands of short tons, greasy basis, 1953)

1. Australia .....	640
2. New Zealand .....	207
3. Argentina .....	204
4. U.S.S.R. ....	nd
5. U. of S. Africa .....	133
6. United States .....	130
7. Uruguay .....	95
8. United Kingdom .....	44 <sup>1</sup>
9. Spain .....	43 <sup>2</sup>
10. China .....	nd

<sup>1</sup> 1952. <sup>2</sup> 1951.



## Industry, Commerce, Communications

**AIRLINES** (millions of passenger miles, monthly average, 1953)

1. United States .....	1,511
2. United Kingdom .....	119
3. U.S.S.R. ....	nd
4. France .....	85 <sup>1</sup>
5. Australia .....	77
6. Canada .....	74
7. Brazil .....	66 <sup>2</sup>
8. Netherlands .....	61
9. Mexico .....	49
10. Belgium .....	23 <sup>3</sup>

<sup>1</sup> Air France lines only. <sup>2</sup> 1952.  
<sup>3</sup> Sabena lines only; including Belgian Congo.

**ALUMINUM** (thousands of short tons, smelter, 1953)

1. United States .....	1,605.1
2. Canada .....	495.0 <sup>1</sup>
3. U.S.S.R. ....	275.0 <sup>1</sup>
4. West Germany .....	164.3
5. France .....	149.8
6. United Kingdom .....	124.3
7. Japan .....	61.6
8. Norway .....	61.2
9. Italy .....	61.0
10. Austria .....	54.9

<sup>1</sup> 1952.

**ELECTRICITY** (billions of kwh, 1953)

1. United States .....	442.3
2. U.S.S.R. ....	133.0
3. United Kingdom .....	65.5 <sup>1</sup>
4. Canada .....	65.3
5. West Germany .....	60.5 <sup>2</sup>
6. Japan .....	55.7 <sup>2</sup>
7. France .....	38.9 <sup>2</sup>
8. Italy .....	29.0 <sup>2</sup>
9. Sweden .....	22.4 <sup>2</sup>
10. Norway .....	18.8 <sup>2</sup>

<sup>1</sup> Excluding Northern Ireland. <sup>2</sup> Including private commercial generation. <sup>3</sup> 1952; including private commercial generation.

**EMPLOYMENT INDEX** (non-agricultural, 1953; 1948 = 100)<sup>1</sup>

1. West Germany .....	122
2. Japan .....	121
3. Luxembourg .....	118 <sup>2</sup>
4. Canada .....	116
5. U. of S. Africa .....	111 <sup>3</sup>
6. New Zealand .....	108
7. Australia .....	108
8. Norway .....	108
9. Philippines .....	108 <sup>4</sup>
10. United States .....	108

<sup>1</sup> Data on U.S.S.R. and satellites not included. <sup>2</sup> Wage earners only. <sup>3</sup> Excluding commerce and services. <sup>4</sup> 1949 = 100.

**EXPORT INDEX** (1953; 1948 = 100)<sup>1</sup>

1. Japan .....	471
2. Netherlands .....	292
3. Austria .....	270

4. France .....	221
5. Denmark .....	208
6. Ireland .....	188
7. Turkey .....	182
8. West Germany .....	180
9. Italy <sup>2</sup> .....	152
10. Finland .....	152

<sup>1</sup> Data on U.S.S.R. and satellites not included. <sup>2</sup> Including Trieste (British-U.S. zone).

**IMPORT INDEX** (1953; 1948 = 100)<sup>1</sup>

1. Japan .....	418
2. Turkey .....	217
3. Austria .....	207
4. Ethiopia .....	195 <sup>2</sup>
5. Italy <sup>3</sup> .....	174
6. Denmark .....	169
7. Netherlands .....	157
8. Canada .....	151
9. Burma .....	149
10. Norway .....	141

<sup>1</sup> Data on U.S.S.R. and satellites not included. <sup>2</sup> Including Eritrea. <sup>3</sup> Including Trieste (British-U.S. zone).

**INDUSTRIAL PRODUCTION INDEX** (1953; 1948 = 100)<sup>1</sup>

1. Japan .....	257
2. West Germany .....	251
3. Greece .....	193 <sup>2</sup>
4. Austria .....	184
5. Italy .....	161
6. Spain .....	148
7. Netherlands .....	144
8. Norway .....	140
9. Yugoslavia .....	136
10. Mexico .....	133

<sup>1</sup> Data on U.S.S.R. and satellites not included. <sup>2</sup> Not including mining.

**MERCHANT FLEETS** (millions of gross tons, 1953)<sup>1</sup>

1. United States .....	25.7 <sup>2</sup>
2. Brit. Commonwealth .....	19.0
3. Norway .....	5.9
4. Panamá .....	3.8
5. France .....	3.5
6. Italy .....	3.3
7. Netherlands .....	3.0
8. Japan .....	2.8
9. Sweden .....	2.3
10. U.S.S.R. ....	1.5

<sup>1</sup> Ships of 1,000 gross tons or more. <sup>2</sup> Not including Great Lakes shipping.

**MOTOR VEHICLES** (production in thousands, 1953)

1. United States .....	7,327 <sup>1</sup>
2. United Kingdom .....	734
3. France .....	498
4. Canada .....	480 <sup>1</sup>
5. West Germany .....	471
6. U.S.S.R. ....	400 <sup>2</sup>
7. Italy .....	175
8. Australia .....	64 <sup>2</sup>
9. Japan .....	45
10. Czechoslovakia .....	nd

<sup>1</sup> Factory sales. <sup>2</sup> 1952.

**RAILWAYS** (millions of metric freight-tons carried, monthly average, 1953)

1. United States .....	198.3 <sup>1</sup>
2. U.S.S.R. ....	nd
3. United Kingdom .....	24.4 <sup>2</sup>
4. West Germany .....	20.6
5. France .....	13.6
6. Canada .....	13.4 <sup>3</sup>
7. Japan .....	12.5 <sup>4</sup>
8. Poland .....	nd
9. India .....	10.9 <sup>5</sup>
10. Belgium .....	5.1 <sup>6</sup>

<sup>1</sup> Class I railways only. <sup>2</sup> Excluding Northern Ireland. <sup>3</sup> 1952. <sup>4</sup> State railways only. <sup>5</sup> 1952; state railways only. <sup>6</sup> Carload lots only.

**STEEL, CRUDE** (millions of short tons, 1953)

1. United States .....	1,113.8
2. U.S.S.R. ....	42.0
3. United Kingdom .....	19.7
4. West Germany .....	17.0
5. France .....	14.0 <sup>1</sup>
6. Japan .....	8.4
7. Belgium .....	5.0
8. Czechoslovakia .....	4.2 <sup>2</sup>
9. Canada .....	4.1
10. Poland .....	4.0

<sup>1</sup> Including Saar. <sup>2</sup> 1952.

**TELEPHONES** (number per 100 population, 1953)

1. United States .....	30.3
2. Sweden .....	26.4
3. Canada .....	22.9
4. Switzerland .....	20.9
5. New Zealand .....	20.9
6. Denmark .....	18.1
7. Australia .....	15.3
8. Norway .....	15.1
9. Iceland .....	14.8
10. United Kingdom .....	11.7

## Human Resources

**BIRTH RATE, HIGHEST ANNUAL** (per 1,000 pop., 1953)<sup>1</sup>

1. U.S.S.R. ....	nd
2. Mexico .....	44.9
3. China .....	nd
4. Thailand .....	28.4 <sup>2</sup>
5. Yugoslavia .....	28.2
6. Canada .....	27.9 <sup>3</sup>
7. India .....	26.7 <sup>4</sup>
8. U. of S. Africa .....	25.7 <sup>5</sup>
9. Argentina .....	24.9 <sup>6</sup>
10. United States .....	24.7

<sup>1</sup> Following smaller countries not included: Costa Rica, 53.9; Guatemala, 51.1; El Salvador, 47.8; Ecuador, 46.5 (1952); Venezuela, 46.1 (including jungle Indians); Malayan Federation, 44.4 (1952); Dominican Republic, 42.2 (1952); Ceylon, 39.4; Trinidad and Tobago, 37.7; Panamá, 37.0 (excluding tribal Indians); Chile, 36.1; Puerto Rico, 35.1; Israel, 30.2 (Jewish population only); Peru, 25.9. <sup>2</sup> 1950. <sup>3</sup> Excluding Yukon and Northwest Territories. <sup>4</sup> Registration area only. <sup>5</sup> European population only. <sup>6</sup> 1952.

**DEATH RATE, LOWEST ANNUAL (per 1,000 population, 1953)<sup>1</sup>**

1. Netherlands .....	7.7
2. Norway .....	8.3
3. Canada .....	8.6 <sup>2</sup>
4. Argentina .....	8.8 <sup>3</sup>
5. Japan .....	8.9
6. U. of S. Africa .....	8.9 <sup>4</sup>
7. Denmark .....	9.0
8. Australia .....	9.0 <sup>5</sup>
9. United States .....	9.6
10. Spain .....	9.7

<sup>1</sup> Following smaller countries not included: Israel, 6.3 (Jewish population only); Puerto Rico, 8.1; New Zealand, 8.8 (excluding Maoris); Panama, 9.0 (excluding tribal Indians); Finland, 9.6. <sup>2</sup> Excluding Yukon and Northwest Territories. <sup>3</sup> 1952. <sup>4</sup> European population only. <sup>5</sup> Excluding full-blooded aborigines.

**ARMED FORCES (army, navy, air, strength in thousands, 1953)<sup>1</sup>**

1. U.S.S.R. ....	4,750
2. China .....	4,500 <sup>2</sup>
3. United States .....	3,590 <sup>3</sup>
4. United Kingdom .....	850
5. France .....	835
6. Poland .....	600 <sup>4</sup>
7. Yugoslavia .....	600 <sup>5</sup>
8. India .....	nd
9. Turkey .....	430
10. Spain .....	425 <sup>6</sup>

<sup>1</sup> Rough estimates. <sup>2</sup> Communist China (not including 6,000,000–10,000,000 in militia); Nationalist forces on Formosa estimated at 600,000. <sup>3</sup> June 30, 1953. <sup>4</sup> Including about 100,000 security and frontier defense troops. <sup>5</sup> 1951. <sup>6</sup> 1952.

**NAVIES (number of warships, 1953)<sup>1</sup>**

1. United States .....	544
2. United Kingdom .....	135
3. U.S.S.R. ....	126
4. Spain .....	26 <sup>2</sup>
5. France .....	24
6. Argentina .....	23
7. Sweden .....	17
8. China <sup>3</sup> .....	nd
9. Netherlands .....	11
10. Brazil .....	11

<sup>1</sup> Excluding submarines, frigates and escort types; estimated number of submarines, Dec. 1953: U.S.S.R., 370; U. S., 201; United Kingdom, 57; Sweden, 21; France, 14; Turkey, 10. <sup>2</sup> Including 20 destroyers. <sup>3</sup> Communist China only.

**Gross National Product or Expenditure**

(in millions of dollars)

Source: U. S. Department of Commerce.

Item	1929	1933	1938	1945	1948	1951	1953	1954*
Gross national product.....	104,436	55,964	85,227	213,558	257,325	328,232	364,857	355,900
Personal consumption expenditures....	78,952	46,392	64,641	121,699	177,609	208,342	230,080	231,800
Durable goods.....	9,212	3,469	5,686	8,105	22,214	27,148	29,749	28,400
Nondurable goods.....	37,677	22,251	33,985	73,222	98,741	111,054	118,925	119,400
Services.....	32,063	20,672	24,970	40,372	56,654	70,140	81,406	84,000
Gross private domestic investment.....	16,231	1,391	6,661	10,430	41,176	56,864	51,408	45,000
New construction.....	8,707	1,431	3,960	3,833	17,904	23,332	25,536	26,500
Producers' durable equipment.....	5,850	1,589	3,644	7,654	19,110	23,177	24,378	22,500
Change in business inventories.....	1,674	-1,629	-943	-1,057	4,162	10,355	1,494	-4,000
Net foreign investment.....	771	150	1,109	-1,438	1,956	227	-1,866	-1,000
Government purchases.....	8,482	8,031	12,816	82,867	36,584	62,799	85,235	80,100
Federal.....	1,311	2,018	5,280	75,923	21,019	40,995	60,105	53,100
National security.....	1,344	2,022	5,286	.....	15,984	37,260	52,022	45,800
National defense.....				.....	11,578	33,864	49,993	44,400
Other national security.....				.....	4,406	3,396	2,029	1,400
Other.....							1,031	5,570
Less: Government sales.....	33	4	6	2,158	535	419	402	300
State and local.....	7,171	6,013	7,536	8,071	15,565	21,804	25,130	27,000

\* First half at annual rate, seasonally adjusted; detail will not necessarily add to totals because of rounding.

**How Consumers Spend Their Dollar**

Source: U. S. Department of Commerce.

Group	(in millions of dollars)									1952 % of total
	1929	1932	1939	1945	1947	1949	1950	1951	1952	
Food, alcohol and tobacco .....	21,374	12,719	21,072	45,924	60,483	63,145	65,606	73,715	77,750	35.6
Clothing, accessories, and jewelry.....	11,018	5,973	8,299	20,247	23,144	23,007	23,062	24,621	25,199	11.5
Personal care.....	1,116	817	1,004	2,077	2,261	2,216	2,303	2,421	2,515	1.1
Housing.....	11,421	8,964	8,940	12,205	14,603	18,080	20,210	21,874	24,014	11.0
Household operation.....	10,509	6,675	9,461	14,665	22,717	23,540	26,412	27,319	27,601	12.7
Medical care and death expenses.....	3,620	2,575	3,386	5,902	7,312	8,885	9,518	10,155	10,852	5.0
Personal business.....	5,221	3,111	3,725	4,787	6,232	7,576	8,706	9,214	9,961	4.6
Transportation.....	7,496	3,924	6,250	6,694	14,876	19,274	22,570	22,104	22,509	10.3
Recreation.....	4,327	2,439	3,446	6,314	9,733	10,276	11,347	11,347	11,716	5.4
Private education and research.....	664	571	628	871	1,316	1,663	1,794	2,002	2,199	1.0
Religious and welfare activities.....	1,196	973	938	1,572	1,589	1,762	1,859	1,963	2,148	1.0
Foreign travel and remittances—net.....	799	467	317	1,621	804	1,164	1,163	1,373	1,666	8
Total consumer outlay.....	78,761	49,208	67,466	123,079	165,570	180,588	194,550	208,108	218,130	100.0

## Regional Economic Differences

Source: U. S. Depts. of Commerce and Labor and *Sales Management*, American Telephone and Telegraph Co. and Edison Electric Institute.

State	1950 % of employed in Agri- culture	1950 Manufac- turing	Income received per capita, 1953	% increase per capita income received, 1929-53	Est. retail sales* (\$ millions, 1953)	% distribution of electric customers, 1953	% households with telephone service, Jan. 1954
New England.....	....	....	....	....	11,036	6.79	...
Maine.....	9.3	34.2	1,369	+142	926	.67	63
New Hampshire.....	6.5	40.4	1,620	+148	566	.43	68
Vermont.....	18.2	24.6	1,401	+133	398	.26	64
Massachusetts.....	1.8	37.4	1,812	+102	5,423	3.34	81
Rhode Island.....	1.5	44.0	1,749	+106	858	.57	72
Connecticut.....	2.9	42.6	2,194	+139	2,866	1.52	91
Middle Atlantic.....	....	....	....	....	36,637	20.76	...
New York.....	2.9	29.8	2,158	+92	18,809	10.29	80
New Jersey.....	2.5	37.7	2,095	+121	6,027	3.62	82
Pennsylvania.....	4.1	35.5	1,822	+138	11,802	6.85	76
East North Central.....	....	....	....	....	35,593	20.73	...
Ohio.....	6.9	36.6	2,012	+169	9,830	5.54	81
Indiana.....	11.6	34.8	1,834	+215	4,725	2.72	72
Illinois.....	7.1	32.0	2,088	+124	11,352	5.61	72
Michigan.....	6.7	40.9	2,033	+169	8,478	4.62	82
Wisconsin.....	18.6	30.6	1,712	+170	4,208	2.24	73
West North Central.....	....	....	....	....	16,166	9.36	...
Minnesota.....	22.1	16.3	1,547	+173	3,495	2.15	80
Iowa.....	28.5	15.2	1,518	+178	3,063	1.65	82
Missouri.....	17.5	21.8	1,652	+170	4,387	2.58	30
North Dakota.....	44.2	2.9	1,295	+233	723	.37	60
South Dakota.....	40.5	4.9	1,362	+227	687	.41	64
Nebraska.....	29.6	9.2	1,533	+175	1,646	.88	77
Kansas.....	23.0	12.6	1,550	+191	2,166	1.32	77
South Atlantic.....	....	....	....	....	19,783	13.16	...
Delaware.....	8.8	32.4	2,304	+151	519	.23	82
Maryland.....	6.1	24.9	1,847	+164	2,499	1.84	70
District of Columbia.....	0.2	7.3	2,109	+77	1,389	...	87
Virginia.....	14.6	20.5	1,361	+223	3,009	1.93	55
West Virginia.....	9.8	18.9	1,257	+171	1,430	1.08	47
North Carolina.....	24.6	27.9	1,097	+255	3,129	3.72	42
South Carolina.....	26.1	27.9	1,095	+335	1,559	...	37
Georgia.....	21.2	23.0	1,184	+260	2,755	2.07	48
Florida.....	12.2	10.7	1,368	+183	3,494	2.29	52
East South Central.....	....	....	....	....	8,557	6.10	...
Kentucky.....	25.7	15.8	1,167	+215	2,218	1.53	45
Tennessee.....	21.8	21.1	1,186	+240	2,845	2.02	53
Alabama.....	24.3	21.8	1,043	+242	2,191	1.46	41
Mississippi.....	42.1	12.6	834	+205	1,303	1.09	30
West South Central.....	....	....	....	....	15,011	8.67	...
Arkansas.....	35.0	13.8	939	+208	1,413	.85	33
Louisiana.....	17.3	15.1	1,249	+201	2,351	1.67	53
Oklahoma.....	20.5	9.8	1,327	+192	2,115	1.38	61
Texas.....	16.0	13.5	1,480	+218	9,132	4.77	58
Mountain.....	....	....	....	....	6,230	3.37	...
Montana.....	24.8	8.5	1,689	+181	713	.41	61
Idaho.....	26.8	9.2	1,411	+172	700	.40	60
Wyoming.....	20.5	6.0	1,650	+140	423	.19	64
Colorado.....	15.1	12.2	1,675	+172	1,688	.90	76
New Mexico.....	18.4	5.9	1,347	+252	694	.39	44
Arizona.....	14.7	8.8	1,473	+157	976	.49	53
Utah.....	12.4	12.2	1,510	+181	793	.47	76
Nevada.....	10.5	5.1	2,175	+166	244	.12	66
Pacific.....	....	....	....	....	20,033	11.06	...
Washington.....	9.3	21.2	1,882	+164	2,833	1.71	72
Oregon.....	12.1	22.7	1,724	+169	2,029	1.11	65
California.....	7.3	19.6	2,039	+116	15,172	8.24	76
Total.....	12.2	25.9	1,709	+151	172,048	100.00	69

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### National Income by Distributive Shares (in millions of dollars)

Source: U. S. Department of Commerce.

Type of share	1929	1933	1939	1945	1948	1950	1951	1953	% of Total 1953
National income.....	87,814	40,159	72,753	181,248	221,641	239,956	277,041	305,002	100.0
Compensation of employees.....	51,085	29,539	48,108	123,181	140,927	154,325	180,420	209,061	68.5
Wages and salaries.....	50,423	28,997	45,941	117,577	135,172	146,526	170,881	197,980	64.9
Private.....	45,485	23,855	37,742	82,664	116,424	124,297	142,050	164,503	53.9
Military.....	308	267	388	21,819	3,970	4,999	8,684	10,207	3.4
Government civilian.....	4,630	4,875	7,811	13,094	14,778	17,230	20,147	23,270	7.6
Supplements to wages and salaries.....	662	542	2,167	5,604	5,755	7,799	9,539	11,081	3.6
Employer contributions for social insurance.....	101	133	1,540	3,805	3,042	3,976	4,753	4,745	1.5
Other labor income.....	561	409	627	1,799	2,713	3,823	4,786	6,336	2.1
Income of unincorporated enterprises and inventory valuation adjustment.....	14,759	5,599	11,610	30,835	38,389	36,140	40,809	38,444	12.6
Business and professional.....	8,791	3,166	7,293	19,011	21,649	22,855	24,791	26,215	8.6
Income of unincorporated enterprises	8,649	3,691	7,459	19,117	22,061	23,989	25,135	26,410	8.7
Inventory valuation adjustment.....	142	-525	-166	-106	-412	-1,134	-344	-195	.1
Farm.....	5,968	2,433	4,317	11,824	16,740	13,285	16,018	12,229	4.0
Rental income of persons.....	5,425	1,971	2,742	5,634	7,198	8,473	9,129	10,596	3.5
Corporate profits and inventory valuation adjustment.....	10,100	-1,992	5,689	18,413	30,619	35,106	39,913	38,466	12.6
Corporate profits before tax.....	9,628	151	6,403	18,977	32,769	39,970	41,173	39,430	12.9
Corporate profits tax liability.....	1,369	521	1,441	10,689	12,510	17,829	22,476	21,144	6.9
Corporate profits after tax.....	8,259	-370	4,962	8,288	20,259	22,141	18,697	18,286	6.0
Dividends.....	5,813	2,056	3,788	4,691	7,248	9,207	9,090	9,365	3.1
Undistributed profits.....	2,446	-2,426	1,174	3,597	13,011	12,934	9,607	8,921	2.9
Inventory valuation adjustment.....	472	-2,143	-714	-564	-2,150	-4,864	-1,260	-964	.3
Net interest.....	6,445	5,042	4,604	3,185	4,508	5,912	6,770	8,435	2.8

### Minutes of Working Time Required for Purchase Per Pound of Selected Foods

Source: U. S. Bureau of Labor Statistics.

Food	United States Sept. 1951	France (Paris) Oct. 1951	Germany Sept. 1951	Ireland Aug. 1951	Italy Sept. 1951	Norway Aug. 1951	Switzerland Oct. 1951	U.S.S.R. (Moscow Area) Apr. 1952
Flour, wheat.....	4	20	15	6	15	6	18	27
Macaroni.....	8	...	...	...	20	17	...	45
Rice.....	6	33	...	...	17	17	16	91
Bread.....	6	9	12	8	13	7	7	14
Beef, average.....	31	126	...	72	128	58	...	132
Pork chops.....	32	91	87	68	124 <sup>1</sup>	59 <sup>1</sup>	97	220 <sup>1</sup>
Veal, average.....	48	120	94	...	...	48	100	...
Lamb, leg.....	31	133	...	76	...	61	85	140
Fish (fresh, frozen).....	18	33	31	42	65	18	...	135
Butter.....	30	135	115	83	162	63	117	270
Cheese.....	22	104	...	60	109	38	35	...
Milk, fresh <sup>2</sup> .....	8	16	15	16	20	9	12	42
Eggs <sup>3</sup> .....	32	118	125	109	126	82	97	187
Fresh apples.....	4	19 <sup>1</sup>	16	...	...	...	9	89
Cabbage.....	2	7	...	...	...	5	6	37
Carrots.....	5	9	8	...	...	12	7	9
Potatoes.....	2	3	3	5	5	3	4	9
Coffee.....	32	175	585	...	250	68	122	531
Tea.....	49	...	...	74	...	228	188	960
Oleomargarine.....	13	64	39	55	...	19	...	152
Sugar.....	4	21	21	9	37	7	14	110

<sup>1</sup> Pork, average. <sup>2</sup> Quart. <sup>3</sup> Dozen.

### Civilian Consumption of Principal Foods (in pounds per capita)

Source: U. S. Dept. of Agriculture.

Foods	1935-39 avg.	1947-49 avg.	1954 <sup>2</sup>	Foods	1935-39 avg.	1947-49 avg.	1954 <sup>2</sup>
Red meats.....	125.3	146.4	150.	Processed fruits <sup>4</sup> .....	25.1	41.5	41.7 <sup>5</sup>
Poultry meats.....	15.3	21.7	28.2	Fresh vegetables.....	139.	150.	140-145
Eggs <sup>1</sup> .....	296.	380.	410.	Processed vegg. <sup>4</sup> .....	30.0	41.4	47.0
Fluid milk and cream.....	330.	359.	355.	Potatoes, sweetpots.....	149.3	124.3	112.0
Cheese.....	5.5	6.9	7.4	Sugar.....	96.7	93.5	95-96
Butter.....	16.8	10.5	9.0	Corn products.....	37.4	33.5	30.6
Margarine.....	2.8	5.5	7.8	Wheat flour.....	157.	135.	127.
Fats and oils <sup>2</sup> .....	28.9	28.9	30.7	Coffee.....	13.9	18.0	15.8
Fresh fruits.....	137.1	130.3	106	Cocoa.....	4.3	4.0	3.8

<sup>1</sup> Number, not pounds. <sup>2</sup> Excludes butter and margarine. <sup>3</sup> Preliminary indications. <sup>4</sup> Pack year. <sup>5</sup> Excluding dried fruits.

### Average Retail Prices of Principal Food Items

Source: U. S. Department of Labor.

Prices in cents per pound except for milk (cents per quart), eggs and oranges (cents per dozen), and tomatoes (cents per No. 2 can).

Item	1913	1920	1922	1929	1932	1941	1943	1945	1947	1949	1950	1951	1953
Wheat flour.....	3.3	8.1	5.1	5.1	3.2	4.5	6.1	6.4	9.6	9.6	9.8	10.4	10.5
Corn meal.....	3.0	6.5	3.9	5.3	3.6	4.3	5.6	6.4	9.8	9.1	9.0	9.6	12.6
Bread, white.....	5.6	11.5	8.7	8.8	7.0	8.1	8.9	8.8	12.5	14.0	14.3	15.7	16.4
Round steak.....	22.3	39.5	32.3	46.0	29.7	39.1	43.9	40.6	75.6	85.3	93.6	109.3	91.5
Chuck roast.....	16.0	26.2	19.7	31.4	18.5	25.5	30.2	28.1	51.5	55.5	61.6	74.1	52.9
Pork chops.....	21.0	42.3	33.0	37.5	21.5	34.3	40.3	37.1	72.1	74.3	75.4	79.4	82.7
Bacon, sliced.....	27.0	52.3	39.8	43.9	24.2	34.3	43.1	41.1	77.7	66.5	63.7	67.2	78.5
Ham, whole.....	...	...	...	...	...	30.4	37.7	34.7	67.5	63.4	62.0	66.5	69.7
Lamb, leg.....	18.9	39.3	36.6	40.2	23.8	29.7	40.2	40.0	64.2	72.5	74.4	83.1	72.2
Butter.....	38.3	70.1	47.9	55.5	27.8	41.1	52.7	50.7	80.5	72.5	72.9	81.9	79.0
Cheese.....	22.1	41.6	32.9	39.5	24.4	30.0	37.4	35.6	59.0	...	51.8	59.1	59.8
Milk, fresh (delivered).....	8.9	16.7	13.1	14.4	10.7	13.6	15.5	15.6	19.6	21.1	20.6	23.1	23.4
Eggs.....	34.5	68.1	44.4	52.7	30.2	39.7	57.2	58.1	69.6	69.6	60.4	73.7	69.8
Bananas.....	...	12.6	10.3	9.7	6.5	7.2	11.7	10.4	15.1	16.6	16.3	16.3	16.8
Oranges.....	...	63.2	57.4	44.7	30.2	31.0	44.3	48.5	43.4	51.8	49.3	48.7	49.0
Cabbage.....	...	6.4	4.6	5.3	4.1	4.2	7.1	6.1	7.3	6.7	5.9	8.6	7.2
Onions.....	...	7.1	7.9	6.7	5.0	5.0	7.5	6.9	7.4	7.4	6.8	7.9	8.6
Potatoes.....	1.7	6.3	2.8	3.2	1.7	2.3	4.6	4.9	5.0	5.5	4.6	5.1	5.4
Tomatoes.....	...	14.8	13.4	12.8	9.3	9.1	12.6	12.2	19.3	15.2	14.7	18.8	17.6
Prunes, dried.....	...	28.1	20.1	15.3	9.2	9.8	16.6	17.5	24.7	23.1	24.6	27.4	29.1
Coffee.....	29.8	47.0	36.1	47.9	29.4	23.6	30.0	30.5	46.9	55.4	79.4	86.8	89.2
Lard.....	15.8	29.5	17.0	18.1	8.7	12.7	19.0	18.8	31.5	19.2	19.1	24.6	20.2
Sugar.....	5.5	19.4	7.3	6.4	5.0	5.7	6.8	6.7	9.7	9.5	9.7	10.1	10.6

### Consumers' Price Index (1947-49 = 100)

Source: U. S. Bureau of Labor Statistics.

Items	1947	1948	1949	1951	1953	1954*
All items.....	95.5	102.8	101.8	111.0	114.4	114.9
Total food.....	95.9	104.1	100.0	112.6	112.8	112.7
Apparel.....	97.1	103.5	99.4	106.9	104.8	104.4
Housing total.....	95.0	101.7	103.3	112.4	117.7	118.8
Rent.....	94.4	100.7	105.0	113.1	124.1	128.0
Gas and electricity.....	97.6	100.0	102.5	103.1	106.6	107.5
Solid fuels and fuel oil.....	88.8	104.4	106.8	116.4	123.9	124.5
Household furnishings.....	97.2	103.2	99.6	111.2	107.9	106.7
Household operation.....	97.2	102.6	100.1	109.0	115.3	117.2
Transportation.....	90.6	100.9	108.5	118.4	129.7	129.4
Medical care.....	94.9	100.9	104.1	111.1	121.3	124.4
Personal care.....	97.6	101.3	101.1	110.5	112.8	113.5
Reading and recreation.....	95.5	100.4	104.1	106.5	108.0	107.6
Other goods and services.....	96.1	100.5	103.4	109.7	118.2	120.2

\* Average of first 5 months.

## Selected Types of Individual Savings

(in millions of dollars)

Source: Federal Reserve Board, Treasury Department, Securities and Exchange Commission, Institute of Life Insurance, Federal Home Loan Bank, Department of Commerce.

Type	1939	1945	1953	Type	1939	1945	1953
Life insurance.....	23,024	37,509	65,150	Savings and loans association assets	4,118	7,365	22,823
Time deposits:				U. S. Government securities	8,800	56,100	61,800
Mutual savings banks.....	10,523	15,385	24,345	Currency.....	4,000	20,200	20,600
Commercial banks.....	15,331	30,241	42,001	Total.....	75,574	196,032	273,085
Postal savings systems.....	1,278	2,932	2,466				
Demand deposits.....	8,500	26,300	33,900				

## Current Assets and Liabilities of All U. S. Corporations

(in billions of dollars)

Source: U. S. Securities and Exchange Commission

	1939	1945	1950	1951	1953
Total current assets:.....	54.5	97.4	161.5	180.2	190.6
Cash on hand & in banks.....	10.8	21.7	28.1	30.4	31.4
U. S. Govt. securities.....	2.2	21.1	19.7	20.5	21.5
Notes & accounts receivable.....	22.1	25.9	56.8	61.9	68.2
Inventories.....	18.0	26.3	55.1	65.3	67.9
Other.....	1.4	2.4	1.7	2.1	2.4
Total current liabilities:.....	30.0	45.8	79.8	94.2	98.5
Notes & accounts payable.....	21.9	25.7	48.3	56.3	61.0
Federal income tax.....	1.2	10.4	16.7	22.0	19.3
Other.....	6.9	9.7	14.9	15.9	18.2
Net working capital.....	24.5	51.6	81.6	86.1	92.4
Ratio of assets per dollar of liabilities.....	1.8	2.1	2.0	1.9	1.9

## Consumer Credit

(in millions of dollars)

Source: Federal Reserve Board.

End of year	Total	Installment credit	Non-installment credit*	Charge accounts
1929.....	6,444	3,151	1,691	1,602
1932.....	3,567	1,521	1,026	1,020
1935.....	4,911	2,694	1,034	1,183
1939.....	7,222	4,503	1,305	1,414
1940.....	8,338	5,514	1,353	1,471
1943.....	4,901	2,136	1,325	1,440
1944.....	5,665	2,462	1,591	1,612
1946.....	8,384	4,172	2,136	2,076
1948.....	14,411	8,968	2,730	2,713
1949.....	17,104	11,516	2,908	2,680
1950.....	20,813	14,490	3,317	3,006
1952.....	25,827	18,684	3,801	3,342
1953.....	28,896	21,807	3,840	3,249
1954†.....	27,520	20,932	3,949	2,639

\* Single-payment loans and service credit. † End of May, preliminary.

## Business Population

(in thousands of concerns)

Source: U. S. Department of Commerce, Dun & Bradstreet.

Item	1929	1933	1941	1943	1946	1947	1949	1950	1951	1953 <sup>5</sup>
Total operating businesses <sup>1</sup> .....	3,029.0	2,782.1	3,269.6	2,905.1	3,487.2	3,783.2	4,000.0	4,050.7	4,108.5	4,194.6
Manufacturing.....	257.0	166.8	236.6	244.9	285.9	312.0	320.5	320.7	327.2	325.4
Wholesale trade.....	148.1	141.8	194.4	172.6	229.2	250.9	261.8	266.2	273.1	283.7
Retail trade.....	1,327.0	1,291.2	1,558.3	1,329.1	1,555.4	1,685.9	1,794.3	1,815.8	1,834.0	1,856.7
Transportation, communications, public utilities.....	119.5	107.6	147.2	129.4	162.2	173.2	179.1	179.5	182.7	184.0
Finance, insurance & real estate.....	316.2	281.7	295.1	286.2	320.3	321.9	323.0	325.5	329.9	337.6
Service industries.....	590.9	574.9	614.4	553.6	656.5	711.5	736.8	735.6	735.5	740.8
Mining & quarrying.....	36.3	32.8	37.2	32.1	33.8	35.2	37.0	37.0	37.4	38.3
Contract construction.....	233.8	185.4	186.4	157.2	243.8	292.6	347.5	370.5	388.6	428.2
New entrants <sup>2</sup> .....	( <sup>3</sup> )	( <sup>3</sup> )	290.0	146.0	617.4	460.8	331.1	348.2	363.2	340.5
Discontinued businesses <sup>3</sup> .....	( <sup>3</sup> )	( <sup>3</sup> )	270.7	337.0	208.7	239.2	306.5	289.6	309.3	331.0
Commercial & industrial failures <sup>4</sup> .....	22.9	19.9	11.8	3.2	1.1	3.5	9.2	9.2	8.1	8.9

<sup>1</sup> Annual Averages. <sup>2</sup> Annual totals. <sup>3</sup> Not available. <sup>4</sup> Closures resulting in a known loss to creditors. <sup>5</sup> Preliminary.



## Industrial Production Indexes, by Groups

(1947-49 average = 100)

Source: Board of Governors of the Federal Reserve System.

Industry	1950	1951	1953	1954*	Industry	1950	1951	1953	1954*
Durable manufactures.....	116	128	153	137	Leather and products.....	101	94	99	94
Ferrous metals.....	114	129	133	106†	Paper and allied products.....	118	125	132	131
Nonferrous metals.....	116	116	129		Printing and publishing.....	111	113	121	119
Fabricated metal products.....	115	122	136	122	Chemicals and allied products.....	121	136	147	146
Machinery.....	114	130	160	139	Petroleum and coal products.....	110	122	130	124
Transportation equipment.....	120	135	189	176	Food and beverage products.....	103	105	107	107
Instruments and related products.....	114	128	155	143	Tobacco manufactures.....	101	107	108	101
Stone, clay and glass products.....	118	131	133	129	Total manufactures.....	113	121	136	126
Lumber and products.....	113	113	118	117	Minerals.....	105	115	116	112
Furniture and misc.....	117	116	131	119	Fuels.....	103	114	115	112
Nondurable manufactures.....	111	114	118	114	Metals, stone and earth.....	111	121	119	108
Textile mill products.....	111	107	104	92	Total industrial production.....	112	120	134	124
Apparel and allied products.....	108	105	110	104					
Rubber products.....	119	119	128	112					

\* First 5 months seasonally adjusted average, preliminary.

† All primary metal manufacturing.

## Consumer Durable Goods Output

Source: Electrical Merchandising; MART Magazine, Caldwell-Clements, Inc., Radio-Electronics-Television Manufacturers Association; Automobile Manufacturers Association.

Year	Electric clothes washers		Electric ranges		Electric vacuum cleaners		Electric refrigerators		Radio sets		Television sets		Passenger cars	
	Number sold, in thou-sands	Average retail price	Number sold, in thou-sands	Average retail price	Number sold, in thou-sands	Average retail price	Number sold, in thou-sands	Average retail price	Number sold, in thou-sands	Average retail price	Number sold, in thou-sands	Average retail price	Factory sales, in thou-sands	Average factory price
1900.....	....	....	....	....	....	....	....	....	....	....	....	....	4	\$1,229
1910.....	3 <sup>1</sup>	\$ 75 <sup>1</sup>	....	....	....	....	5 <sup>4</sup>	\$550 <sup>4</sup>	100 <sup>6</sup>	\$50 <sup>6</sup>	....	....	181	1,190
1920.....	600	120	40	....	1,024	\$50	....	....	....	....	....	....	1,906	949
1925.....	736	141	85	\$176	1,056	62	75	425	2,000	83	....	....	3,735	658
1929.....	956	113	173	165	1,253	50	778	292	4,428	136	....	....	4,587	621
1932.....	570	59	60	150	447	40	798	195	3,000	47	....	....	1,135	545
1937.....	1,465	72	405	134	1,210	56	2,310	171	8,065	56	....	....	3,916	573
1941.....	1,892	79	728	142	1,670	56	3,500	155	13,000	35	....	....	3,780	679
1945.....	251 <sup>2</sup>	....	74	....	258 <sup>8</sup>	....	264	....	500	40	....	....	70	818
1946.....	2,047	121	577	186	2,290	68	2,100	207	14,000	50	7	\$323	2,149	921
1947.....	3,657	148	1,210	230	3,801	75	3,400	240	17,000	67	179	467	3,558	1,114
1948.....	4,196	173	1,600	235	3,361	77	4,766	260	16,000	40	975	393	3,909	1,220
1949.....	3,065	171	1,056	230	2,890	77	4,450	255	10,000	50	3,000	323	5,119	....
1950.....	4,273	184	1,830	233	3,529	79	6,200	258	14,600	49	7,464	300	6,666	....
1952.....	3,267	217	1,400	245	2,842	92	4,075	275	13,000	47	5,385	308	5,337	....
1953.....	3,500	223	1,300	256	2,775	95	3,775	295	13,400	43	7,300	230	6,123	....

\* 1909. \* Includes gas engine washers. \* Includes hand cleaners. \* 1921. \* 1922.

## Textile Consumption

Source: U. S. Dept. of Commerce; Textile Economic Bureau.

Year	Cotton (thousands of bales)		Wool consumption* (millions of lbs.)		Filament rayon yarn (thousands of lbs.)		Year	Cotton (thousands of bales)		Wool consumption* (millions of lbs.)		Filament rayon yarn (thousands of lbs.)	
	1920.....	1929.....	1932.....	1941.....	1943.....	1920.....	1945.....	1947.....	1950.....	1952.....	1953.....	1920.....	1945.....
	5,843	5,407	5,017	10,586	10,666	314	9,143	9,539	9,652	9,189	9,321	645	645
						368						698	698
						230						625	625
						648						463	463
						636						486	486
												602,400	602,400
												729,300	729,300
												949,100	949,100
												844,600	844,600
												864,700	864,700

\* Scoured basis.

## Metals Production (in short tons)

Source: American Iron & Steel Institute, Iron Age, American Zinc Institute, American Bureau of Metal Statistics and U. S. Bureau of Mines.

Year	Rolled iron and steel products				Aluminum (primary)	Copper (smelter output from domestic ore)	Zinc (slab smelter output, all grades)*	Refined lead (from domestic ore; anti-monial lead excluded)
	Pig iron and ferro-alloys	Steel ingots and castings	Total	Plates and sheets				
1929.....	47,727,661	63,205,490	45,997,746	13,928,670	113,986	1,001,432	631,601	672,498
1932.....	9,835,227	15,322,901	11,705,219	3,956,505	52,444	272,005	213,531	255,337
1939.....	35,677,097	52,798,714	39,067,553	13,931,919	163,545	712,675	538,198	420,967
1941.....	56,686,604	82,839,259	62,324,187	20,293,071	309,067	966,072	863,955	470,517
1943.....	62,769,947	88,836,512	63,292,673	22,543,040	920,179	1,092,939	971,873	406,544
1945.....	54,919,029	79,701,648	59,811,669	19,314,316	495,060	722,894	799,520	356,535
1948.....	61,911,559	88,640,470	69,191,952	25,694,480	623,456	834,813	850,105	339,413
1949.....	54,916,785	77,978,176	60,882,387	23,470,886	603,462	752,750	870,113	404,449
1950.....	66,400,311	96,836,075	75,190,581	30,231,722	718,622	909,343	910,354	418,809
1951.....	72,448,543	105,199,848	81,911,320	31,869,683	836,881	928,330	931,833	448,473
1952.....	63,353,955	93,168,039	71,348,528	27,251,852	937,331	925,377	961,430	532,778
1953.....	77,250,168	111,609,719	85,943,724	35,699,732	1,252,013	924,610†	971,191	533,883

\* From 1940 includes both foreign and domestic ores. † Preliminary.

## Farm Income (in millions of dollars)

Source: U. S. Department of Agriculture.

Year	Est. cash income		Government payments	Total cash income
	Crops	Livestock and livestock products		
1919.....	7,645	6,925	...	14,570
1929.....	5,120	6,179	...	11,299
1931.....	2,532	3,837	...	6,369
1935.....	2,957	4,117	573	7,647
1941.....	4,605	6,470	544	11,619
1945.....	9,419	12,001	742	22,162
1946.....	10,835	13,719	772	25,326
1947.....	13,231	16,523	314	30,068
1949.....	12,586	15,426	185	28,197
1950.....	12,575	16,198	283	29,056
1951.....	13,053	19,569	286	32,908
1952.....	14,627	18,498	292	33,417
1953.....	13,797	17,178	213	31,188

## Farm Prices and Parity Prices

Source: U. S. Bureau of Agricultural Economics.

Year	June 15, 1954		Actual price as % of parity price
	Price received	Parity price*	
1919.....	7,645	6,925	76.7%
1929.....	5,120	6,179	76.4
1931.....	2,532	3,837	82.3
1935.....	2,957	4,117	84.1
1941.....	4,605	6,470	77.2
1945.....	9,419	12,001	88.7
1946.....	10,835	13,719	81.3
1947.....	13,231	16,523	91.4
1949.....	12,586	15,426	71.5
1950.....	12,575	16,198	123.8
1951.....	13,053	19,569	84.6
1952.....	14,627	18,498	77.2
1953.....	13,797	17,178	100.0

Farms—Population and Property			
Source: U. S. Bureau of the Census.			
Item	1930	1940	1950
Farm population (thousands) ..	29,447	29,047	24,335
Number of farms (thousands) ..	6,289	6,097	5,382
Tenancy as % of total.....	42.2	38.7	26.8
All land in farms (million acres)	986	1,061	1,159
Average acreage per farm.....	156.9	174.0	215.3
Value of farm property (millions of dollars)*.....	56,973	41,227	101,738

Product	Price received	Parity price*	Actual price as % of parity price
Wheat (bushel).....	\$ 1.91	\$ 2.49	76.7%
Rye (bushel).....	.99	1.71	57.9
Rice (bushel).....	4.18	5.47	76.4
Corn (bushel).....	1.49	1.81	82.3
Oats (bushel).....	.74	.88	84.1
Barley (bushel).....	1.05	1.36	77.2
Sorghum grain (100 pounds) ..	2.27	2.56	88.7
Hay (ton).....	20.40	25.10	81.3
Cotton (pound).....	.32	.35	91.4
Cottonseed (ton).....	51.40	71.90	71.5
Soybeans (bushel).....	3.49	2.82	123.8
Peanuts (pound).....	.11	.13	84.6
Flaxseed (bushel).....	3.48	4.51	77.2
Potatoes (bushel).....	1.51	1.51	100.0
Sweet potatoes (bushel).....	2.70	2.79	96.8
Apples (bushel).....	3.54	2.82	125.5
Oranges on tree (box).....	2.30	3.09	74.4
Hogs (hundredweight).....	21.70	20.70	104.8
Beef cattle (hundredweight) ..	16.90	21.20	79.7
Veal calves (hundredweight) ..	17.50	23.30	75.1
Lambs (hundredweight).....	20.30	23.00	88.3
Butterfat (pound).....	.56	.75	74.7
Milk, wholesale (100 pounds) ..	3.48	4.74	73.4
Chickens (pound).....	.23	.30	76.7
Eggs (dozen).....	.33	.47	70.2
Wool (pound).....	.55	.59	93.2

\* Includes land, buildings, livestock, implements and machinery.

\* Parity price is the August 1909–July 1914 average price increased by the rise in index of prices paid by farmers, including interest and taxes.

## Agricultural Output by States, 1953 Crops

(in thousands of bushels; except cotton lint in thousands of 500 pounds gross weight bales; tobacco in thousands of pounds; livestock in thousands). Source: U. S. Department of Agriculture.

State	Wheat	Corn	Cotton lint	Potatoes	Tobacco	Cattle*	Hogs*
Alabama.....	418	47,806	970	6,118	651	1,879	1,006
Arizona.....	598	510	998	2,342	.....	909	25
Arkansas.....	1,425	11,849	1,550	494	.....	1,566	374
California.....	11,286	2,736	1,725	47,880	.....	3,349	452
Colorado.....	42,322	13,233	.....	18,090	.....	2,096	155
Connecticut.....	.....	1,620	.....	2,688	25,418	190	21
Delaware.....	1,072	6,474	.....	1,775	26,132	80	37
Florida.....	.....	9,884	25	10,206	.....	1,679	504
Georgia.....	2,960	58,200	760	456	131,860	1,439	1,597
Idaho.....	46,347	2,640	.....	45,900	.....	1,253	103
Illinois.....	56,781	500,472	.....	412	.....	3,946	5,667
Indiana.....	46,144	241,690	.....	3,062	13,020	2,095	4,005
Iowa.....	2,626	581,145	.....	630	.....	5,746	10,433
Kansas.....	144,662	50,869	.....	133	110	4,298	774
Kentucky.....	6,974	71,106	.....	1,479	423,320	1,880	957
Louisiana.....	.....	10,920	815	998	168	1,842	380
Maine.....	.....	546	.....	57,720	.....	253	25
Maryland.....	5,268	20,385	.....	871	37,125	540	209
Massachusetts.....	.....	1,610	.....	2,088	11,409	198	102
Michigan.....	44,692	80,262	.....	10,730	.....	2,043	737
Minnesota.....	16,171	268,704	.....	12,480	220	3,900	3,057
Mississippi.....	1,192	32,934	2,145	441	.....	2,039	590
Missouri.....	41,028	136,412	445	682	4,136	3,950	3,305
Montana.....	114,174	3,340	.....	2,258	.....	2,281	101
Nebraska.....	85,980	204,176	.....	5,852	.....	4,752	2,133
Nevada.....	468	120	.....	544	.....	607	21
New Hampshire.....	.....	645	.....	1,071	.....	122	9
New Jersey.....	2,025	10,355	.....	6,519	.....	230	80
New Mexico.....	745	1,275	330	75	.....	1,175	47
New York.....	13,894	29,216	.....	30,860	125	2,356	160
North Carolina.....	8,200	57,699	453	6,118	852,825	961	1,035
North Dakota.....	101,361	25,740	.....	15,510	.....	1,881	309
Ohio.....	69,136	194,205	.....	4,800	24,030	2,488	2,511
Oklahoma.....	70,776	6,412	445	200	.....	3,315	346
Oregon.....	34,298	1,080	.....	11,840	.....	1,429	101
Pennsylvania.....	20,688	56,574	.....	13,020	34,794	1,954	554
Rhode Island.....	.....	315	.....	1,282	.....	29	5
South Carolina.....	3,636	23,146	695	1,651	172,630	497	504
South Dakota.....	32,224	135,206	.....	1,875	.....	3,205	1,243
Tennessee.....	5,795	52,894	700	1,280	129,253	1,845	904
Texas.....	23,035	33,874	4,350	2,484	.....	8,587	906
Utah.....	9,081	1,599	.....	3,430	.....	740	55
Vermont.....	.....	2,814	.....	779	.....	489	12
Virginia.....	7,119	24,840	18	6,300	145,650	1,410	609
Washington.....	104,150	1,260	.....	11,200	.....	1,084	80
West Virginia.....	1,342	7,067	.....	1,350	4,542	617	149
Wisconsin.....	1,620	149,643	.....	14,335	19,803	4,275	1,725
Wyoming.....	6,823	1,113	.....	1,403	.....	1,178	37
Total.....	1,168,536	3,176,615	16,437	373,711	2,057,221	94,677	48,179

\* Number on farms as of Jan. 1, 1954.

## Domestic Animals on Farms, Number and Value

Source: U. S. Department of Agriculture.

January 1:	Number (thousands)							Value of domestic animals (millions of dollars)
	Horses	Mules	Dairy cows	Sheep	Swine	Chickens	Turkeys	
1940.....	10,444	4,034	24,940	52,107	61,165	438,288	8,569	3,791
1945.....	8,715	3,235	27,770	46,520	59,373	516,497	7,082	6,050
1947.....	7,340	2,789	25,842	37,489	56,810	467,217	5,879	7,813
1950.....	5,548	2,233	23,853	29,826	58,852	456,549	5,124	7,481
1951.....	4,993	2,074	23,722	30,635	62,852	442,657	5,091	9,150
1952.....	4,330	1,913	23,369	32,088	63,582	449,925	5,822	9,737
1953.....	3,798	1,753	24,094	31,861	54,294	429,731	5,305	7,714
1954.....	3,432	1,603	24,735	30,902	48,179	439,271	5,323	6,739



## Farm Income—Estimated Receipts from Major Farm Marketings (in millions of dollars)

Source: U. S. Department of Agriculture.

Year	Cotton and cotton-seed	Tobacco	Food grains	Oil-bearing crops	Feed grains and hay	Vegetables	Fruits and nuts	Meat animals	Dairy products	Poultry & eggs
1919.....	2,282	500	1,749	96	1,173	631	597	4,045	1,522	1,106
1929.....	1,511	279	788	85	697	751	582	3,017	1,838	1,187
1932.....	461	115	220	29	247	359	299	1,159	986	562
1939.....	627	271	464	110	485	545	411	2,271	1,346	775
1944.....	1,548	688	1,369	581	1,203	1,510	1,446	5,706	2,938	2,473
1947.....	2,245	1,033	2,768	908	2,328	1,710	1,160	9,340	4,046	2,926
1949.....	2,632	904	2,339	846	2,299	1,641	1,013	8,383	3,778	3,088
1951.....	2,849	1,187	1,896	1,058	1,966	1,670	1,214	11,308	4,290	3,667
1953.....	3,074	1,094	2,431	986	2,075	1,753	1,217	8,926	4,269	3,760

## Farm to Retail Price Spreads for Farm Food Products\*

Source: U. S. Department of Agriculture.

Year	Retail cost (dollars)	Net farm value (dollars)	Farmer's share of consumer's dollars (%)	Year	Retail cost (dollars)	Net farm value (dollars)	Farmer's share of consumer's dollars (%)
Average:				1942.....	409	195	48
1913-19.....	361	170	47	1943.....	459	236	51
1920-24.....	444	181	41	1944.....	451	233	52
1925-29.....	439	183	42	1945.....	459	246	54
1930.....	422	163	39	1947.....	932	471	51
1932.....	285	90	32	1948.....	994	498	50
1933.....	277	90	32	1949.....	939	435	46
1935.....	347	134	39	1950.....	924	432	47
1937.....	363	151	42	1951.....	1,026	495	48
1939.....	318	122	38	1952.....	1,028	481	47
1940.....	319	127	40	1953.....	1,002	452	45
1941.....	349	154	44	1954†.....	993	443	45

\* Retail cost of 1935-39 average annual purchases of farm food products by a family of three average consumers; farm value of equivalent quantities sold by producers adjusted for value of by-products. † Average first 5 months.

## Fuel Production

Source: U. S. Dept. of Interior, U. S. Dept. of Commerce, and American Gas Association.

Year	Coke, in thousands of short tons	Anthracite coal, in thousands of short tons	Bituminous coal, in thousands of short tons	Natural gas, in millions of therms (produced and marketed) <sup>1</sup>	Manufactured gas, in millions of therms <sup>2</sup>	Crude petroleum, in thousands of 42-gal. barrels
1929.....	59,884	73,828	534,989	20,490 <sup>3</sup>	2,070 <sup>4</sup>	1,007,323
1933.....	27,589	49,541	333,631	16,640 <sup>3</sup>	1,820	905,656
1939.....	44,327	51,487	394,855	26,220	1,830	1,264,962
1941.....	65,187	56,368	514,149	29,780	1,990	1,402,228
1945.....	67,308	54,934	577,617	41,960	2,600	1,713,655
1949.....	63,637	42,702	437,868	55,770	2,680	1,841,940
1951.....	79,331	42,670	533,645	76,660	2,435	2,244,529
1952.....	68,232	39,361	465,312	86,140	2,009	2,291,997
1953.....	78,467	30,023	453,000	90,250 <sup>4</sup>	1,756	2,359,998

<sup>1</sup> Includes all natural gas in sales of natural gas mixed with manufactured gas. <sup>2</sup> Includes all manufactured gas products produced and purchased by gas utilities. <sup>3</sup> Estimated. <sup>4</sup> Preliminary.

## Electric Energy Output of Utilities\*

(in millions of kilowatt hours)

Source: Federal Power Commission.

Year	Total	Ownership					Source of energy	
		Privately owned	Publicly owned†	Municipal	Federal	Co-operatives, power districts, state projects	% Public to total	Fuels Fuels as % of total
1920.....	39,405	37,716	1,689	1,373	58	94	4.3	23,644 60.0
1929.....	92,180	87,514	4,667	3,498	300	451	5.1	59,533 64.6
1932.....	79,393	74,488	4,905	3,517	445	572	6.2	46,515 58.6
1933.....	81,740	76,668	5,072	3,583	458	654	6.2	48,283 59.1
1935.....	95,287	89,330	5,958	4,229	555	732	6.3	56,915 59.7
1939.....	127,642	115,078	12,564	5,688	5,476	944	9.8	84,078 65.9
1941.....	164,788	144,290	20,498	7,023	10,794	2,192	12.4	113,925 69.1
1942.....	185,979	158,052	27,928	7,610	16,893	2,848	15.0	122,109 65.7
1943.....	217,759	180,247	37,511	9,223	24,485	3,156	17.2	144,127 66.2
1944.....	228,189	185,850	42,339	9,637	28,866	3,065	18.6	154,244 67.6
1945.....	222,486	180,926	41,560	9,624	28,001	3,146	18.7	142,516 64.1
1946.....	223,178	181,020	42,158	10,801	26,960	3,598	18.9	144,772 64.9
1947.....	255,739	208,105	47,634	12,415	29,877	4,511	18.6	177,313 69.3
1948.....	282,698	228,231	54,467	13,123	35,373	5,134	19.3	200,228 70.8
1949.....	291,100	233,112	57,988	13,410	38,102	5,643	19.9	201,351 69.2
1950.....	329,141	266,860	62,281	15,244	40,388	5,793	18.9	233,203 70.9
1951.....	370,673	301,845	68,828	17,617	44,120	6,204	18.6	270,922 73.1
1952.....	399,224	322,126	77,098	17,490	52,492	7,115	19.3	294,121 73.7
1953.....	442,665	354,272	88,393	21,625	58,064	8,704	20.0	337,431 76.2

\* Output by industrial establishments was as follows (in millions of kilowatt hours): 1939—33,667; 1940—38,070; 1941—43,519; 1942—47,167; 1943—49,781; 1944—51,336; 1945—48,769; 1946—46,431; 1947—51,661; 1948—64,110; 1949—53,967; 1950—59,533; 1951—62,685; 1952—63,831; 1953—71,505. † Includes non-central stations.

## Wholesale and Retail Trade: No. of Establishments, 1939 and 1948

Source: Bureau of Census, Department of Commerce.

Kind of business group	No. of establishments		Kind of business group	No. of establishments	
	1939	1948		1939	1948
Retail trade, total.....	1,770,355	1,771,317	Drugs, chemicals, allied products	3,298	4,671
Food group.....	560,549	504,902	Tobacco and products (except leaf).....	2,717	3,019
Eating and drinking places.....	305,386	346,677	Dry goods, apparel.....	8,275	11,733
General stores.....	39,688	21,566	Furniture, home furnishings.....	2,214	3,813
General merchandise group.....	50,267	52,741	Paper and its products.....	2,898	4,044
Apparel group.....	106,959	115,707	Farm products—raw materials...	2,086	2,594
Furniture, furnishings, appliance group.....	52,827	85,680	Automotive.....	7,818	14,693
Automotive group.....	60,132	86,194	Electrical goods.....	3,072	5,443
Gasoline service stations.....	241,858	188,301	Hardware, plumbing, heating...	3,568	5,901
Lumber, building, hardware group..	79,313	99,043	Lumber, construction materials..	3,303	5,890
Drug and proprietary stores.....	57,903	55,903	Machinery equipment & supplies	11,270	21,430
Liquor.....	19,136	33,460	Metals, metalwork (except scrap)	1,017	1,803
Secondhand stores.....	23,962	16,969	Waste materials.....	6,059	7,717
Other retail stores.....	172,375	164,174	Other merchant wholesalers.....	10,508	15,688
Wholesale trade, total.....	199,726	243,366	Manufacturers' sales branches, offices.....	17,926	23,768
Merchant wholesalers, total.....	100,961	146,518	Petroleum bulk stations, terminals.	30,825	29,451
Groceries, confectionery, meats..	15,681	17,345	Agents, brokers.....	21,083	24,361
Farm products.....	10,945	13,539	Assemblers (mainly farm products)	28,931	19,268
Beer, wines, distilled spirits.....	6,232	7,195			

### Wholesale Sales (in millions of dollars)

Source: U. S. Department of Commerce.

Type of establishment	1939	1945	1947	1948	1950	1951	1953
Merchant wholesalers.....	22,550	44,082	73,279	79,815	88,662	95,540	95,257
Durable goods.....	6,272	10,881	24,428	27,431	34,196	37,626	37,141
Automotive.....	1,055	1,496	3,784	4,093	5,077	5,388	5,610
Lumber and building material.....	1,265	2,216	5,012	5,972	7,650	8,084	7,540
Electrical goods.....	788	1,200	3,677	4,425	6,185	6,250	6,326
Hardware.....	592	937	1,909	2,014	2,407	2,533	2,435
House furnishings.....	380	627	1,299	1,337	1,814	1,689	1,759
Jewelry.....	234	593	865	799	827	828	753
Machinery and metals.....	1,958	3,812	7,882	8,791	10,236	12,854	12,718
Nondurable goods.....	16,278	33,201	48,851	52,384	54,466	57,914	58,116
Apparel and dry goods.....	1,889	3,611	5,747	5,729	5,592	5,498	5,421
Beers, wines and liquors.....	1,249	3,520	4,135	4,070	4,333	4,423	4,783
Drugs and sundries.....	521	1,063	1,350	1,370	1,497	1,660	1,847
Food.....	6,055	12,147	16,412	18,869	19,383	20,869	21,685
Paper and its products.....	575	909	1,828	1,902	2,266	2,678	2,596
Tobacco products.....	1,106	1,811	2,445	2,530	2,651	2,737	2,930
All other.....	4,883	10,140	16,934	17,914	18,744	20,049	18,854
All establishments.....	26,244	53,708	87,263	95,172	103,896	113,168	111,936
Durable goods.....	6,272	10,881	24,428	27,431	34,196	37,626	37,141
Nondurable goods.....	19,972	42,827	62,835	67,741	69,700	75,542	74,795

### Chain Stores vs. Other Stores (in millions of dollars)

	1939	1941	1945	1948	1950	1951	1952	1953
Chain stores*.....	9,570	12,635	17,280	29,737	31,232	34,000	30,098	32,930
Other retail stores.....	32,472	42,639	60,754	100,784	112,315	118,975	133,987	137,812
Total sales.....	42,042	55,274	78,034	130,521	143,547	152,975	164,085	170,742
Chains as per cent of total.....	22.8	22.9	22.1	22.8	21.8	22.2	18.4	19.2

\* Beginning 1952, new series, chain stores now include only those firms with 11 or more stores.

### Wholesale Price Indexes by Major Commodity Groups (1947-49 = 100)

Source: U. S. Bureau of Labor Statistics.

Commodity	1947	1948	1949	1951	1953	1954*
All commodities.....	96.4	104.4	99.2	114.8	110.1	110.8
Farm products.....	100.0	107.3	92.8	113.4	97.0	98.3
Processed foods.....	98.2	106.1	95.7	111.4	104.6	104.6
Textile products & apparel.....	100.1	104.4	95.5	110.6	97.3	95.2
Hides, skins & leather products.....	101.0	102.1	96.9	120.3	98.5	95.1
Fuel, power & lighting materials.....	90.9	107.1	101.9	106.7	109.5	109.5
Chemicals & allied products.....	101.4	103.8	94.8	110.0	105.7	107.3
Rubber & products.....	99.0	102.1	98.9	148.0	125.0	124.9
Lumber & wood products.....	93.7	107.2	99.2	123.9	120.2	116.6
Pulp, paper & allied products.....	98.6	102.9	98.5	119.6	116.1	116.6
Metals & metal products.....	91.3	103.9	104.8	122.8	126.9	126.7
Machinery & motive products.....	92.5	100.9	106.6	119.0	123.0	124.4
Furniture & other household durables.....	95.6	101.4	103.1	114.1	114.2	115.3
Nonmetallic minerals—structural.....	93.9	101.7	104.4	113.6	118.2	120.6
Tobacco manufactures & bottled beverages.....	98.0	100.4	101.6	108.1	115.7	119.4
Miscellaneous.....	100.8	103.1	96.1	104.9	97.8	105.7

\* First 5 months.



# Retail Sales by Kind of Business Group

(in millions of dollars)

Source: U. S. Bureau of the Census.

Kind of business	1951		1952		1953	
	Amount	%	Amount	%	Amount	%
Durable-goods stores <sup>1</sup> .....	\$ 54,479	34.4	\$ 55,270	33.7	\$ 60,270	35.7
Automotive group.....	28,156	17.8	28,337	17.3	33,319	19.5
Motor-vehicle, other automotive dealers.....	26,282	16.6	26,383	16.1	31,499	18.4
Tire, battery, accessory dealers.....	1,874	1.2	1,944	1.2	1,820	1.1
Furniture and appliance group.....	8,604	5.4	8,926	5.4	9,125	5.3
Furniture, home furnishings stores.....	5,095	3.2	5,255	3.2	5,135	3.0
Household appliance, radio stores.....	3,509	2.2	3,671	2.2	3,990	2.3
Lumber, building, hardware group.....	10,208	6.4	10,200	6.2	10,421	6.1
Lumber, building-materials dealers.....	7,470	4.7	7,572	4.6	7,713	4.5
Hardware stores.....	2,738	1.7	2,628	1.6	2,708	1.6
Non-durable goods stores <sup>1</sup> .....	103,744	65.6	108,815	66.3	110,369	64.6
Apparel group.....	10,209	6.5	10,633	6.5	10,255	6.0
Men's and boys' wear stores.....	2,461	1.5	2,497	1.5	2,249	1.3
Women's apparel, accessory stores.....	4,049	2.6	4,233	2.6	4,089	2.4
Family and other apparel stores.....	2,015	1.3	2,210	1.3	2,181	1.3
Shoe stores.....	1,684	1.1	1,693	1.1	1,735	1.0
Drug and proprietary stores.....	4,547	2.9	4,717	2.9	4,789	2.8
Eating and drinking places.....	12,207	7.7	12,688	7.7	13,002	7.6
Food group <sup>1</sup> .....	37,626	23.8	39,771	24.2	40,777	23.9
Grocery stores.....	30,346	19.2	32,238	19.6	33,623	19.7
Gasoline service.....	9,151	5.8	9,976	6.1	10,536	6.2
General-merchandise group.....	18,202	11.5	18,694	11.4	19,005	11.1
Department stores, excluding mail order.....	10,095	6.4	10,277	6.3	10,370	6.0
Mail order (catalog sales).....	1,309	.8	1,339	.8	1,327	.8
Variety stores.....	2,859	1.8	2,996	1.8	3,094	1.8
Other general merchandise stores.....	3,939	2.5	4,082	2.5	4,215	2.5
Liquor stores.....	2,975	1.9	3,165	1.9	3,324	1.9
All retail sales.....	158,223	100.0	164,085	100.0	170,742	100.0

<sup>1</sup> Sales of other durable-goods stores, other food stores and other non-durable goods stores not reported separately but included in totals.

## Sales of Leading Retail Outlets

Source: Moody's Manual of Industrials.

	1953 Sales*		1953 Sales*
	(in thousands)		(in thousands)
<b>DEPARTMENT STORES</b>		<b>DRUG STORES</b>	
J. C. Penney Co. ....	\$1,109,508	United-Rexall Drug, Inc. ....	\$189,244
Allied Stores Corp. ....	515,830	Walgreen Co. ....	181,538
Federated Department Stores ....	478,849	Sterling Drug Co. ....	161,706
May Department Stores Co. ....	454,149	People's Drug Store, Inc. ....	54,523
Macy's ....	332,583		
Gimbel Bros., Inc. ....	286,419	<b>SHOE STORES</b>	
Marshall Field & Co. ....	217,960	International Shoe Co. ....	251,028†
		Endicott Johnson Corp. ....	140,097
		Melville Shoe Co. ....	108,871
		Edison Bros. Stores, Inc. ....	81,634
		A. S. Beck Shoe Corp. ....	65,285
		G. R. Kinney Co. ....	44,436
<b>VARIETY STORES</b>		<b>MAIL-ORDER HOUSES</b>	
F. W. Woolworth Co. ....	713,870	Sears-Roebuck & Co. ....	2,981,925
S. S. Kresge Co. ....	337,299	Montgomery Ward & Co. ....	999,123
W. T. Grant Co. ....	299,768	Spiegel, Inc. ....	134,082
G. C. Murphy Co. ....	187,164		
S. H. Kress & Co. ....	172,980	<b>FURNITURE STORES</b>	
J. J. Newberry Co. ....	171,164	Spear & Co. ....	32,590
McCrory Stores Corp. ....	104,787	Barker Bros. Corp. ....	29,081
		Reliable Stores Corp. ....	23,787
		W. & J. Sloane ....	17,204‡
		Sterchi Bros. Stores, Inc. ....	14,870
		Sterling, Inc. ....	10,327
<b>GROCERY STORES</b>			
Great Atlantic & Pacific Tea Co. ....	3,755,687		
Safeway Stores, Inc. ....	1,751,820		
Kroger Co. ....	1,058,608		
American Stores Co. ....	542,035		
First National Stores, Inc. ....	424,522		

\* For accounting year ending in 1952. † Includes operations of Florsheim Co. from acquisition Mar. 10, 1953.  
‡ 9 months.

## Financial Condition of U. S. Life Insurance Companies

(in millions of dollars)

Source: *Spectator Yearbook* and Institute of Life Insurance.

Year	Assets (admitted) Dec. 31	Total income	Premium income	Payment to policyholders*
1910.....	3,876	781	593	387
1920.....	7,320	1,764	1,381	745
1929.....	17,482	4,337	3,343	1,962
1932.....	20,754	4,653	3,495	3,087
1939.....	29,243	5,453	3,776	2,642
1945.....	44,797	7,674	5,159	2,667
1948.....	55,512	9,751	7,157	3,237
1950.....	64,020	11,337	8,189	3,731
1951.....	68,278	12,012	9,040	3,985
1952.....	73,375	13,076	9,883	4,147
1953.....	78,533	14,271	10,847	4,541

\* Beginning 1943, data include payments to U. S. residents by domestic and foreign companies.

## Principal Assets of U. S. Life Insurance Companies<sup>1</sup>

(in millions of dollars)

Source: Institute of Life Insurance.

Type	1939	1945	1953
Government securities ..	7,697	22,545	12,322
Federal.....	5,373	20,583	9,767
State and local.....	2,253	1,047	1,968
Foreign <sup>2</sup> .....	71	915	587
Business securities.....	8,465	11,059	34,395
Bonds <sup>3</sup> .....	7,929	10,060	32,056
Stocks.....	536	999	2,339
Mortgages.....	5,669	6,636	23,275
Real estate.....	2,134	857	1,994
Policy loans.....	3,248	1,962	2,894
Other assets.....	2,030	1,738	3,321
Total.....	29,243	44,797	78,201

<sup>1</sup> End of year. <sup>2</sup> Central government only. <sup>3</sup> Includes International Bank for Reconstruction and Development.

## Domestic Passenger Traffic by Major Carriers

(in millions of passenger-miles)

Source: Interstate Commerce Commission; U. S. Army, Office of the Chief of Engineers; Civil Aeronautics Board.

Year	Steam railroads		Busses		Air carriers		Electric Interurban railways		Inland waterways <sup>1</sup>	
	Passenger- miles	% of total	Passenger- miles	% of total	Passenger- miles	% of total	Passenger- miles	% of total	Passenger- miles	% of total
1939.....	22,713	65.0	9,100	26.0	683	2.0	956	2.7	1,486	4.3
1941.....	29,406	62.7	13,100	27.9	1,385	3.0	1,177	2.5	1,821	3.9
1944.....	95,663	74.2	26,920	20.8	2,178	1.7	2,042	1.6	2,187	1.7
1947.....	45,972	58.5	23,948	30.4	6,110	7.8	771	1.0	1,845	2.3
1949.....	35,133	52.8	22,411	33.7	6,753	10.1	842	1.3	1,402	2.1
1951.....	34,640	50.4	21,499	31.3	10,566	15.4	666	1.0	1,333	1.9
1952.....	34,040	49.3	20,500	29.7	12,528	18.1	650	0.9	1,400	2.0
1953.....	31,800	45.9	20,500	29.6	14,800	21.4	650	0.9	1,500	2.2

<sup>1</sup> Rivers, canals and Great Lakes.

## Domestic Freight Traffic by Major Carriers

(in millions of ton-miles)

Source: Interstate Commerce Commission; U. S. Army, Office of the Chief of Engineers; Civil Aeronautics Board.

Year	Steam railways <sup>1</sup>		Inland waterways <sup>2</sup>		Motor trucks		Oil pipelines		Air carriers <sup>3</sup>	
	Ton- miles	% of total	Ton- miles	% of total	Ton- miles	% of total	Ton- miles	% of total	Ton- miles	% of total
1939.....	338,125	64.22	88,897	16.88	43,931	8.34	55,602	10.56	12	...
1941.....	480,730	64.68	130,916	17.61	63,258	8.51	68,428	9.20	19	...
1944.....	745,573	70.14	137,005	12.89	47,395	4.46	132,864	12.50	71	.01
1947.....	663,442	67.51	135,964	13.84	77,918	7.93	105,161	10.70	158	.02
1949.....	533,862	61.17	130,192	14.91	93,653	10.73	114,916	13.16	235	.03
1951.....	654,340	59.05	168,143	15.17	133,160	12.02	152,115	13.73	378	.03
1952.....	622,300	57.76	154,900	14.37	140,000	12.99	160,000	14.84	420	.04
1953.....	614,000	52.50	185,000	15.82	200,000	17.10	170,000	14.54	450	.04

<sup>1</sup> Includes express and mail. <sup>2</sup> Rivers, canals and domestic traffic on Great Lakes.

## Advertising Expenditures by Medium

Source: Printers' Ink.

Medium	1948		1949		1950		1951		1953	
	Amount (million dollars)	% of total	Amount (million dollars)	% of total	Amount (million dollars)	% of total	Amount (million dollars)	% of total	Amount (million dollars)	% of total
Newspapers.....	1,749.6	36.0	1,905.0	36.6	2,063.2	36.3	2,257.7	35.1	2,655.1	34.0
Radio.....	617.1	12.7	633.8	12.2	667.1	11.7	669.7	10.4	707.9	9.1
Magazines.....	512.7	10.5	492.5	9.5	514.9	9.0	573.7	8.9	663.1	8.5
Direct mail.....	689.1	14.2	755.6	14.5	803.2	14.1	923.7	14.4	1,075.5	13.8
Business papers.....	250.9	5.2	248.1	4.8	251.1	4.4	292.1	4.5	398.8	5.1
Outdoor.....	132.1	2.7	131.0	2.5	142.5	2.5	149.2	2.4	174.7	2.2
Farm papers.....	20.4	.4	20.5	.4	21.2	.4	25.7	.4	30.8	0.4
Television.....	...	...	63.0	1.2	185.0	3.3	373.6	5.8	688.7	8.8
Miscellaneous.....	891.7	18.3	952.7	18.3	1,043.1	18.3	1,160.7	18.1	1,408.2	18.1
Total.....	4,863.6	100.0	5,202.2	100.0	5,691.3	100.0	6,426.1	100.0	7,803.2	100.0

## Number of Service Establishments and Places of Amusement, 1939 and 1948

Source: U. S. Department of Commerce.

Kind of business	1939	1948	Kind of business	1939	1948
<b>PERSONAL SERVICES:</b>			Electrical repair shops.....	15,644	19,440
Barber shops.....	117,998	91,993	Jewelry, watch, clock repair.....	12,485	12,750
Barber and beauty shops.....	4,199	2,591	Leather goods repair.....	2,168	560
Baths and masseurs.....	1,600	1,305	Locksmiths and gunsmiths.....	2,252	1,518
Beauty parlors.....	83,071	74,497	Musical instrument repair.....	982	789
Cleaning and dyeing plants.....	12,616	25,534	Radio repair.....	10,732	12,558
Costume and dress suit rental.....	417	510	Refrigerator repair.....	1,297	2,531
Diaper service.....	n.a.	384	Saw, knife and tool sharpening and repair.....	1,451	1,304
Funeral service, crematories.....	18,196	18,675	Sewing machine repair.....	355	488
Fur repair and storage.....	2,180	2,334	Stove repair.....	365	207
Hat cleaning.....	1,228	1,426	Taxidermists.....	363	211
Laundries, all types.....	22,736	19,182	Tool repair.....	1,451	1,304
Linen supply service.....	718	1,176	Typewriter repair.....	618	638
Photographic studios.....	10,957	14,712	Upholstery, furniture.....	9,685	10,297
Rug cleaning and repairing.....	1,012	1,517	Welding shops.....	4,118	3,536
Shoe repair shops.....	50,115	44,151	<b>OTHER SERVICES:</b>		
Shoe shine parlors.....	7,968	2,962	Hotels.....	27,987	29,650
<b>BUSINESS SERVICES:</b>			Tourist courts and camps.....	13,521	25,919
Advertising agencies.....	1,628	3,279	<b>AMUSEMENT PLACES:</b>		
Auctioneers.....	970	670	Amusement devices.....	1,093	1,604
Blueprinting and photostat.....	500	672	Amusement parks.....	245	368
Coin-operated machine.....	1,554	1,302	Bands, orchestras, entertainers.....	550	2,026
Consumer credit reporting.....	2,576	2,652	Bathing beaches (not municipal).....	344	261
Detective agencies.....	280	603	Bicycle rentals.....	247	147
Disinfecting, exterminating.....	952	1,393	Billiard and pool parlors.....	12,998	9,661
Employment agencies.....	1,424	2,231	Boat and canoe rental.....	1,382	1,587
Interior decorating.....	461	601	Bowling alleys.....	4,646	4,505
Mailing services.....	1,433	1,394	Clubs, baseball.....	276	357
News syndicates.....	n.a.	77	Clubs, football.....	n.a.	21
Outdoor advertising.....	649	798	Dance halls, studios, schools.....	2,191	1,074
Photo finishing laboratories.....	1,201	1,703	Race tracks, automobile.....	36	112
Public stenographers.....	1,329	1,036	Race tracks, dog.....	11	15
Sign painting shops.....	5,391	4,283	Race tracks, horse.....	45	71
Telephone answering service.....	n.a.	367	Riding academies.....	840	709
Window cleaning service.....	823	1,260	Shooting galleries.....	324	181
Window display services.....	215	279	Skating rinks, ice.....	59	42
<b>REPAIR SERVICES:</b>			Skating rinks, roller.....	1,134	1,382
Automotive repair services and garages.....	78,881	95,544	Sports and athletic fields.....	188	211
Automobile rentals.....	648	1,011	Sports promoters, commercial operators.....	n.a.	6,518
Automobile storage, parking.....	11,095	8,533	Swimming pools (not municipal).....	668	499
Armature rewinding shops.....	978	2,023	Theaters, motion pictures.....	15,115	17,689
Bicycle repair shops.....	1,601	1,283	Theaters and theatrical producers.....	231	1,426
Blacksmith shops.....	16,797	8,249	NOTE: n.a.—not available		



### Money in Circulation (in millions of dollars)

Source: U. S. Treasury Department.

June 30	Total*	Gold certifi- cates	Silver dollars	Silver certifi- cates	Sub- sidiary silver	Minor coin	United States notes	Federal reserve notes	Federal reserve bank notes	National bank notes
1929.....	4,746	935	44	387	284	115	262	1,693	4	653
1933.....	5,721	266	28	361	257	113	269	3,061	126	920
1937.....	6,447	88	38	1,078	341	144	282	4,169	38	269
1941.....	9,612	63	53	1,714	434	194	300	6,684	20	151
1943.....	17,421	57	84	1,649	610	236	322	13,747	584	132
1945.....	26,746	52	125	1,651	788	292	323	22,868	527	120
1947.....	28,297	48	148	2,061	876	331	320	23,999	406	106
1950.....	27,156	41	170	2,177	965	361	321	22,760	274	86
1952.....	29,026	38	191	2,088	1,093	393	318	24,605	221	77
1954†.....	29,870	36	210	2,136	1,160	417	321	25,338	182	70

\* Includes Treasury notes of 1890 and for 1932 gold coin. † As of May 31.

### Money and Interest Rates (Per cent per annum)

Source: Federal Reserve Board.

Year	Open market rate in New York City			Commercial loan rates		
	Prime commercial paper, 4 to 6 months*	Prime bankers' acceptances, 90 days*	Call loans, renewal rate†	New York City	7 other northern & eastern cities	11 southern & western cities
1929.....	5.85	5.03	7.61	5.76	5.82	5.93
1932.....	2.73	1.28	2.05	4.20	4.81	5.21
1933.....	1.73	.63	1.16	3.43	4.46	5.04
1935.....	.76	.13	.56	1.76	3.39	3.76
1938.....	.81	.44	1.00	1.69	2.75	3.26
1941.....	.54	.44	1.00	1.97	2.55	3.19
1945.....	.75	.44	1.00	1.99	2.51	2.73
1947.....	1.03	.87	1.38	1.81	2.33	2.76
1949.....	1.48	1.12	1.63	2.37	2.71	3.10
1951.....	2.17	1.60	2.17	2.83	3.09	3.52
1953.....	2.52	1.88	3.06	3.47	3.68	4.04
1954†.....	1.85	1.47	3.11	3.52	3.67	4.00

\* Prevailing rate. † New York Stock Exchange; average of daily quotations. ‡ First six months.

### Federal Reserve System, All Member Banks, Principal Assets and Liabilities\* (all money figures in millions of dollars)

Source: Federal Reserve Board.

	1925	1930	1935	1940	1945	1951	1953	1954†
Loans.....	21,996	23,870	12,175	15,321	22,775	49,561	57,762	57,205
U. S. Gov't obligations.....	3,728	4,125	12,268	15,823	78,338	51,621	52,603	52,726
Other security investments.....	5,160	6,864	5,541	5,982	6,070	11,065	12,057	12,671
Total deposits†.....	34,250	37,029	38,454	56,430	129,670	141,015	150,164	144,513
Demand deposits.....	19,124	18,796	21,056	33,829	91,820	95,968	99,780	94,702
Time deposits.....	10,557	13,012	10,041	12,178	24,210	30,623	35,213	36,384
Capital accounts.....	4,678	6,593	5,145	5,698	7,589	10,218	11,316	11,638
Number of banks.....	9,489	8,052	6,387	6,486	6,884	6,840	6,743	6,724

\* End of year. † As of May 26. ‡ Includes interbank deposits, domestic and foreign, and U. S. Government and Postal Savings deposits.

### Functional Distribution of State Employment and Payroll: October, 1953

Source: U. S. Department of Commerce.

Function	Employees (in thousands)	Pay roll (in millions)
Total all functions.....	4,663	\$1,220.5
Education, total.....	1,949	552.0
Public schools.....	1,634	478.5
Institutions of higher learning.....	293	67.5
Other.....	21	5.8
Highways.....	463	112.1
Public welfare.....	95	23.2
Health.....	71	18.2
Hospitals.....	391	84.4
Police.....	248	73.5
Local fire protection.....	178	38.9
Natural resources.....	115	27.4
Sanitation.....	109	29.0
Local parks and recreation.....	64	14.9
Housing and community redevelopment.....	25	7.3
Employment security.....	40	12.4
State liquor stores.....	14	3.7
Local utilities, total.....	232	72.1
All other.....	668	151.5

### Public Debt of the United States

Source: U. S. Treasury Department.

June 30—	Gross debt	
	Amount (in millions of dollars)	Per capita (dollars)
1800*.....	\$ 83	\$ 15.87
1860.....	65	2.06
1865.....	2,678	75.01
1900.....	1,263	16.60
1915.....	1,191	11.85
1920.....	24,299	228.23
1929.....	16,931	139.04
1932.....	19,487	156.10
1935.....	28,701	225.55
1937.....	36,425	282.75
1939.....	40,440	308.98
1943.....	136,696	999.83
1945.....	258,682	1,848.60
1946.....	269,422	1,905.42
1947.....	258,286	1,792.05
1948.....	252,292	1,720.71
1950.....	257,357	1,696.75
1951.....	255,222	1,653.42
1952.....	259,105	1,650.55
1953.....	266,071	1,666.11
1954 Est.....	269,800	1,666.05
1955 Est.....	273,100	1,670.33

\* Figures for 1800 are as of Jan. 1.

### New Construction Activity, by Type (in millions of dollars)

Source: U. S. Department of Commerce and U. S. Department of Labor.

Activity	1929	1933	1940	1945	1949	1952	1953 <sup>1</sup>
Total new construction activity.....	10,793	2,879	8,682	5,633	22,789	33,008	35,256
New private construction activity.....	8,307	1,231	5,504	3,235	16,384	22,107	23,877
Residential (nonfarm).....	3,625	470	2,985	1,100	8,267	11,100	11,930
New dwelling units.....	3,040	290	2,560	720	7,257	9,870	10,555
Additions and alterations.....	340	145	335	340	825	1,045	1,108
Nonhousekeeping.....	245	35	90	40	185	185	267
Nonresidential building, except farm and public utility ..	2,694	406	1,025	1,020	3,228	5,014	5,680
Industrial.....	949	176	442	642	972	2,320	2,229
Commercial <sup>2</sup> .....	1,135	130	348	203	1,027	1,137	1,791
Other.....	610	100	235	175	1,229	1,557	1,660
Public utility.....	1,578	261	771	827	3,323	4,003	4,146
Railroad.....	510	94	167	264	352	438	442
Telephone and telegraph.....	354	45	122	117	533	570	615
Other public utility.....	714	115	482	446	2,438	2,995	3,359
Farm construction.....	307	49	240	267	1,488	1,905	1,731
All other private.....	103	45	33	21	78	85	120
New public construction activity.....	2,486	1,648	3,628	2,398	6,405	10,901	11,379
Residential.....	...	...	200	80	359	654	556
Nonresidential building.....	659	230	615	937	2,068	4,136	4,352
Industrial.....	...	2	164	755	177	1,684	1,771
Educational.....	389	52	156	59	934	1,619	1,728
Hospital and institutional.....	101	49	54	85	477	473	353
Other.....	169	127	241	38	480	360	500
Military and Naval.....	19	36	385	690	137	1,388	1,307
Highway.....	1,266	847	1,302	398	2,131	2,820	3,165
Sewer and water.....	253	95	338	97	619	790	861
Conservation and development.....	115	359	528	130	793	854	830
All other <sup>2</sup> .....	23	16	260	66	298	308	259

<sup>1</sup> Warehouses, office and loft buildings; stores, restaurants and garages. <sup>2</sup> Miscellaneous public service enterprises and all Federal not included elsewhere.

## Number of Nonfarm Houses Built\*

Source: U. S. Bureau of Labor Statistics, National Bureau of Economic Research.

Year	Houses	Year	Houses	Year	Houses	Year	Houses
1900.....	204,000	1929.....	509,000	1937.....	336,000	1946.....	670,500
1905.....	459,000	1930.....	330,000	1939.....	515,000	1947.....	849,000
1910.....	475,000	1931.....	254,000	1940.....	603,000	1948.....	931,600
1915.....	475,000	1932.....	134,000	1941.....	715,000	1949.....	1,025,100
1920.....	247,000	1933.....	93,000	1942.....	497,000	1950.....	1,396,000
1925.....	937,000	1934.....	126,000	1943.....	350,000	1951.....	1,091,300
1927.....	810,000	1935.....	221,000	1944.....	169,000	1952.....	1,127,000
1928.....	753,000	1936.....	319,000	1945.....	226,000	1953.....	1,103,800

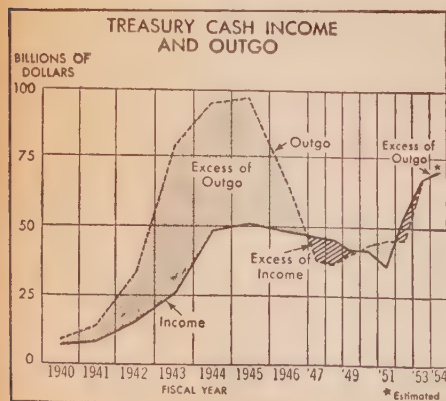
\* Data represents new dwelling units started.

## Summary of Internal Revenue Collections (in millions of dollars)

Source: U. S. Treasury Department.

Fiscal year ending	1939	1943	1945	1946	1947	1948	1949	1950	1951	1953	1954
Total internal revenue collections	5,162	22,369	43,800	40,672	39,108	41,865	40,463	38,957	50,446	69,687	69,920
Corporation income and excess profits.....	1,156	9,669	16,028	12,553	9,676	10,174	11,554	10,854	14,388	21,595	21,546
Total individual income tax and unemployment taxes.....	1,769	4,448	20,813	20,405	21,367	23,379	20,528	19,798	26,625	37,255	37,921
Individual income and old-age insurance.....	1,559	4,158	20,342	19,942	20,802	22,611	19,739	19,027	25,808	36,354	26,086
Unemployment insurance.....	101	156	186	179	186	209	226	223	237	271	284
Railroad retirement.....	109	211	285	284	380	560	563	548	580	629	605
Total miscellaneous internal revenue.....	2,237	4,571	6,960	7,713	8,064	8,311	8,382	8,305	9,433	10,837	10,452
Capital stock tax.....	127	329	372	352	2	2	6	(?)	(?)	(?)	(?)
Estate and gift taxes.....	361	447	643	677	779	899	797	706	730	891	935
Alcoholic beverage taxes.....	588	1,423	2,310	2,526	2,475	2,255	2,211	2,219	2,547	2,781	2,783
Tobacco taxes.....	580	924	932	1,166	1,238	1,300	1,322	1,328	1,380	1,655	1,580
Stamp taxes.....	41	45	66	88	80	79	73	85	93	90	90
Manufacturers' and retailers' excise taxes.....	397	670	1,207	1,415	1,940	2,119	2,221	2,245	2,841	3,359	3,127
Miscellaneous taxes.....	144	732	1,430	1,490	1,551	1,656	1,753	1,721	1,843	2,061	1,937

<sup>1</sup> Less than 1. <sup>2</sup> Repealed for years after June 30, 1945. Beginning with July, 1950, included under "Miscellaneous."



## Monthly Average Railroad Carloadings (in thousands of cars)

Source: Association of American Railroads.

Year	Total	Year	Total
1920.....	3,760	1945.....	3,492
1925.....	4,269	1946.....	3,445
1929.....	4,402	1947.....	3,708
1932.....	2,348	1948.....	3,643
1939.....	2,826	1949.....	2,992
1940.....	3,030	1950.....	3,242
1941.....	3,524	1951.....	3,437
1942.....	3,564	1952.....	3,165
1943.....	3,535	1953.....	3,192
1944.....	3,617	1954*	2,726

\* First 5 months.



Receipts and Expenditures of the National Government (in millions of dollars) *Source: U. S. Treasury Department.*

Yearly average or year ended June 30	Receipts				Expenditures					Total expendi- tures <sup>4</sup>	Surplus (+) or deficit (-)	
	Customs (including tonnage tax) <sup>1</sup>	Internal revenue		Other receipts	Total receipts	Net receipts <sup>2</sup>	Department of the Army <sup>3</sup>	Department of the Navy	Interest on public debt			All other
		Income and profits tax	Other									
1789-1800.....	6	.....	.....	.....	7	7	2	.....	3	1	6	
1801-1810.....	12	.....	.....	.....	13	13	2	.....	4	2	9	
1811-1820.....	16	.....	2	.....	21	21	11	.....	5	3	24	
1821-1830.....	20	.....	.....	.....	22	22	4	.....	4	5	16	
1831-1840.....	20	.....	.....	10	30	30	8	.....	.....	11	24	
1841-1850.....	24	.....	.....	3	27	27	13	.....	.....	11	32	
1851-1860.....	54	.....	.....	6	60	60	16	.....	.....	29	60	
1861-1865.....	69	17	55	20	161	161	548	.....	35	36	684	
1866-1870.....	179	51	171	46	447	447	128	.....	135	86	377	
1871-1875.....	186	8	113	30	337	337	40	.....	112	112	287	
1876-1880.....	146	.....	.....	25	288	288	37	.....	100	102	255	
1881-1885.....	202	.....	132	33	367	367	43	.....	64	135	258	
1886-1890.....	216	.....	127	32	375	375	40	.....	44	177	279	
1891-1895.....	177	.....	150	26	353	353	50	.....	38	260	457	
1896-1900.....	185	.....	207	43	435	435	111	.....	28	288	535	
1901-1905.....	260	.....	255	44	559	559	133	.....	23	334	639	
1906-1910.....	311	4	257	56	628	628	169	.....	23	394	761	
1915.....	210	80	336	72	698	698	202	.....	23	638	1,279	
1918.....	180	2,314	872	299	3,665	3,665	4,870	.....	190	6,358	12,697	
1920.....	323	3,945	1,460	966	6,694	6,694	1,622	.....	1,020	3,025	6,403	
1929.....	602	2,331	607	493	4,033	4,033	426	.....	678	1,830	3,299	
1933.....	251	746	858	225	2,080	2,021	435	.....	689	3,150	4,623	
1937.....	486	2,163	2,434	211	5,294	4,979	628	.....	866	7,756	2,777	
1939.....	319	2,189	2,972	188	5,668	5,104	695	.....	941	8,966	3,862	
1943.....	324	16,094	6,050	934	23,402	22,202	42,526	.....	1,808	14,400	79,622	
1944.....	431	34,655	7,030	3,325	45,441	43,892	49,438	.....	2,609	16,730	95,315	
1945.....	355	35,173	8,729	3,493	47,750	44,762	50,490	.....	3,617	14,549	98,703	
1946.....	435	30,885	9,426	3,492	44,238	40,027	27,987	.....	4,722	12,833	60,703	
1947.....	494	29,305	10,074	4,635	44,508	40,043	5,972	.....	4,958	19,562	39,289	
1949.....	384	29,482	10,825	2,082	42,773	38,246	7,862	.....	5,339	20,730	40,057	
1950.....	423	28,263	11,186	1,439	41,311	37,045	4,130	.....	5,750	20,977	40,167	
1951.....	624	37,753	13,354	1,639	53,369	48,143	8,636	.....	5,613	18,163	44,633	
1952.....	551	51,347	14,288	1,814	67,999	62,129	17,453	.....	5,859	19,750	66,145	
1953.....	613	54,073	15,858	1,912	72,455	65,218	19,309	.....	6,508	20,644	74,607	
1954 est.....	590	56,242	15,757	3,268	75,857	67,629	11,000	.....	6,525	18,628	70,903	
1955 est.....	590	50,587	16,656	3,408	71,241	62,642	16,850	.....	6,800	16,920	65,570	

<sup>1</sup> Beginning 1932, tonnage tax incl. in "Other receipts." <sup>2</sup> Net receipts equal total receipts less (a) appropriations to federal old-age and survivors' insurance trust fund and (b) refunds of receipts beginning fiscal year 1931. <sup>3</sup> Formerly, War Department. <sup>4</sup> Includes Air Force: 1949—\$1,680,460,724; 1950—\$3,320,032,585; 1951—\$6,358,603,828; 1952—\$12,861,619,343; 1953—\$16,009,329,207; 1954 (est.)—\$16,000,000,000; 1955 (est.)—\$15,000,000,000. <sup>5</sup> Does not include net transactions of Army and Air Force relating to deposit fund accounts.

## Average Earnings and Hours Worked Per Week in Manufacturing Industries

Source: U. S. Department of Labor.

Industry	1947		1949		1951		1952		1953		1954 <sup>2</sup>	
	Earn-ings	Hours worked	Earn-ings	Hours worked	Earn-ings	Hours worked	Earn-ings	Hours worked	Earn-ings	Hours worked	Earn-ings	Hours worked
All manufacturing <sup>1</sup> .....	\$54.14	40.1	\$54.92	39.2	\$64.71	40.7	\$67.97	40.7	\$71.69	40.5	\$70.78	39.4
Durable goods.....	57.11	40.5	58.03	39.5	69.47	41.6	73.46	41.5	77.23	41.3	76.10	40.0
Primary metal industries.....	61.03	40.1	60.78	38.3	75.12	41.5	77.33	40.7	84.25	40.9	79.51	38.5
Iron and steel foundries.....	58.45	40.7	55.09	37.2	71.66	42.4	72.22	40.8	76.33	40.6	73.15	38.6
Nonferrous foundries.....	59.96	40.0	60.92	39.0	73.74	41.9	77.79	41.6	80.97	41.1	79.40	39.7
Fabricated metal products.....	56.68	40.6	57.82	39.6	68.81	41.7	72.38	41.6	77.15	41.7	76.15	40.4
Hand tools.....	56.07	40.9	54.54	38.6	69.70	42.5	69.38	41.3	74.70	41.5	73.04	39.8
Hardware.....	54.26	40.4	56.28	39.3	66.49	41.3	70.69	41.1	75.89	41.7	75.52	40.3
Structural metal products.....	58.17	41.2	59.90	40.5	71.49	42.3	74.87	42.3	80.75	42.5	79.34	41.4
Electrical machinery.....	55.66	40.1	56.96	39.5	64.84	41.3	68.80	41.2	71.81	40.8	71.20	39.5
Machinery, except electrical.....	60.52	41.2	60.44	39.5	76.38	43.4	79.79	42.9	82.91	42.2	82.05	41.0
Transportation equipment.....	61.58	39.0	64.95	39.2	75.67	40.9	81.14	41.4	85.28	41.2	85.03	40.3
Automobiles.....	61.86	38.4	65.97	38.9	75.45	39.5	82.82	40.6	87.95	41.1	87.13	40.1
Lumber and wood products.....	51.38	41.5	51.72	40.6	59.98	40.8	63.86	41.2	65.93	40.7	64.23	39.9
Furniture & fixtures.....	48.99	41.1	49.48	40.1	57.27	41.2	61.01	41.5	63.14	41.0	61.91	39.8
Stone, clay and glass.....	53.46	40.9	54.45	39.8	63.91	41.5	66.33	41.2	70.35	40.9	70.21	40.2
Nondurable goods.....	50.61	39.6	51.41	38.8	58.46	39.5	60.98	39.6	63.60	39.5	63.57	38.5
Textile—mill products.....	45.59	39.2	44.83	37.7	51.60	38.8	53.18	39.1	53.57	39.1	51.23	37.6
Cotton, silk, synthetic fibers.....	44.36	39.4	42.89	37.2	50.70	39.3	49.79	38.6	51.09	39.3	48.12	37.5
Woolen and worsted goods.....	52.45	40.1	51.19	38.9	57.87	39.1	62.56	40.1	61.93	39.7	59.40	38.7
Apparel and other finished textiles.....	42.79	36.2	41.89	35.8	46.31	35.9	47.58	36.6	48.41	36.4	48.06	35.3
Leather.....	41.66	37.2	41.61	36.6	46.86	36.9	50.69	38.4	51.65	37.7	51.46	37.2
Food.....	51.87	42.0	53.58	41.5	59.92	41.9	63.23	41.6	66.33	41.2	67.94	40.5
Tobacco.....	36.50	38.1	37.25	37.1	43.51	38.5	44.93	38.4	47.37	38.2	47.14	36.1
Paper.....	55.25	42.8	55.96	41.7	65.51	43.1	68.91	42.8	72.67	43.0	72.13	41.9
Printing and publishing.....	66.73	39.3	70.28	38.7	77.21	38.8	81.48	38.8	85.58	38.9	86.23	38.3
Chemicals.....	56.23	41.5	58.63	41.0	67.81	41.6	70.45	41.2	75.58	41.3	76.96	41.1
Petroleum and coal.....	69.23	40.7	72.36	40.4	80.98	40.9	84.85	40.6	90.17	40.8	90.99	40.3
Rubber.....	56.78	39.0	57.79	38.3	68.61	40.6	74.48	40.7	77.78	40.3	74.93	38.7

<sup>1</sup> Average weekly earnings in 1919 = \$23.29, 1929 = \$26.40, 1932 = \$17.86, 1939 = \$24.23. Average hours worked per week in 1914 = 51.0, 1919 = 47.8, 1929 = 45.7, 1932 = 38.2, 1939 = 37.7. <sup>2</sup> Average of first four months.

## Employment and Unemployment (in millions of persons)

Sources: U. S. Bureau of Labor Statistics, U. S. Bureau of the Census, and U. S. Bureau of Agricultural Economics.

Activity	1941	1943	1945	1948	1949	1950	1952	1953	1954 <sup>1</sup>
Total employment.....	50.4	54.5	52.8	59.4	58.7	60.0	61.3	61.9	60.6
Non-agricultural employment.....	41.3	45.4	44.2	51.4	50.7	52.5	54.5	55.4	54.4
Manufacturing.....	13.0	17.4	15.2	15.3	14.2	14.9	16.3	17.3	16.1
Durable goods.....	...	6.5	6.3	8.3	7.5	8.0	9.3	10.1	9.3
Nondurable goods.....	...	10.9	8.9	7.0	6.7	6.9	7.0	7.2	6.8
Mining.....	.9	.9	.8	1.0	.9	.9	.9	.8	.8
Construction.....	1.8	1.6	1.1	2.2	2.2	2.3	2.6	2.6	2.5
Transportation and public utilities.....	3.2	3.6	3.9	4.2	4.0	4.0	4.2	4.2	4.0
Trade.....	7.6	7.3	7.7	9.5	9.4	9.5	10.3	10.5	10.4
Retail.....	...	5.7	5.9	7.0	6.9	7.0	7.5	7.7	7.6
Wholesale.....	...	1.6	1.8	2.5	2.5	2.5	2.8	2.8	2.8
Finance.....	1.5	1.4	1.4	1.7	1.8	1.8	2.0	2.0	2.1
Service.....	3.6	3.8	3.9	4.8	4.8	4.8	5.4	5.5	5.5
Government.....	4.6	6.0	6.0	5.6	5.8	5.9	6.6	6.6	6.7
Other, self-employed, domestic.....	5.1	3.4	4.2	7.1	7.6	8.4	6.2	5.9	6.3
Agricultural employment.....	9.1	9.1	8.6	8.0	8.0	7.5	6.8	6.5	6.2
Unemployment.....	5.5	1.1	1.1	2.0	3.4	3.1	1.7	1.5	3.4
Public works.....	1.9	( <sup>2</sup> )	...	...	...	...	...	...	...
Total civilian labor force.....	55.9	55.5	53.9	61.4	62.1	63.1	63.0	63.4	64.1
Armed forces.....	1.5	8.9	11.3	1.3	1.5	1.5	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
Total labor force.....	57.4	64.4	65.2	62.7	63.6	64.6	66.4	67.0	67.4

<sup>1</sup> Average of first 5 months not adjusted for seasonal variation. <sup>2</sup> Negligible. <sup>3</sup> Data not available.

### Age of Persons in the Labor Force (in thousands)

Source: U. S. Department of Commerce.

Age	1940*				1953†			
	Male	%	Female	%	Male	%	Female	%
14 to 19....	2,619	7	1,395	11	2,793	6	1,722	9
20 to 24....	5,035	12	2,688	21	3,033	7	2,410	12
25 to 44....	18,817	47	6,107	47	21,313	48	9,028	45
45 to 64....	11,954	29	2,550	19	14,793	33	6,143	31
Over 65....	1,859	5	275	2	2,540	6	651	3
Total.....	40,284	100	13,015	100	44,472	100	19,954	100

\* Week of March 24. † Week of May 2.

### Employment by Major Occupation Group, April 1954

Source: U. S. Bureau of Census.

Major occupation group	Number
Professional, technical, and kindred workers.....	5,689
Farmers and farm managers.....	3,905
Managers, officials, and proprietors, except farm....	6,048
Clerical and kindred workers.....	7,894
Sales workers.....	3,957
Craftsmen, foremen and kindred workers.....	8,248
Operatives and kindred workers.....	12,363
Private household workers.....	1,828
Service workers, except private household.....	5,229
Farm laborers and foremen.....	2,011
Laborers, except farm and mine.....	3,426
Total employed.....	60,598

### Billion-Dollar Companies

(Assets in millions of dollars as of December 31, 1953)

Source: Business Week.

Company	Assets	Company	Assets
Bell Telephone System .....	\$11,973	Pacific Gas & Electric Co. ....	1,620
Standard Oil Co. (N. J.) .....	5,372	Standard Oil Co. (Cal.) .....	1,535
General Motors Corp. ....	4,405	Consolidated Edison Co. (N. Y.) ..	1,509
U. S. Steel Corp. ....	3,247	Atchison, Topeka & Santa Fe Ry. ..	1,499
Pennsylvania R. R. ....	2,505	Sears, Roebuck & Co. ....	1,388
Sacony-Vacuum Oil Co. ....	2,154	Union Pacific R. R. ....	1,346
Standard Oil Co. (Ind.) .....	2,036	Baltimore & Ohio R. R. ....	1,309
New York Central R. R. ....	1,992	Westinghouse Electric Corp. ....	1,265
Southern Pacific System .....	1,982	Union Carbide & Carbon Co. ....	1,191
E. I. du Pont de Nemours & Co. ....	1,846	Humble Oil Co. ....	1,186
Texas Co. ....	1,805	Commonwealth Edison Co. ....	1,167
Bethlehem Steel Corp. ....	1,783	Sinclair Oil Co. ....	1,141
Gulf Oil Co. ....	1,766	Cities Service Co. ....	1,103
Ford Motor Co. ....	1,757	Phillips Petroleum Co. ....	1,039
General Electric Co. ....	1,697		

### Average Earnings and Hours Worked Per Week in Nonmanufacturing Industries

Source: U. S. Department of Labor.

Industry	1947		1949		1951		1953		1954*	
	Earn-ings	Hours worked	Earn-ings	Hours worked	Earn-ings	Hours worked	Earn-ings	Hours worked	Earn-ings	Hours worked
Anthracite mining.....	\$62.77	37.7	\$56.78	30.2	\$66.66	30.3	\$72.91	29.4	\$68.49	27.5
Bituminous coal mining.....	66.59	40.7	63.28	32.6	77.79	35.2	85.31	34.4	76.39	30.9
Metalliferous mining.....	54.63	41.8	61.55	40.9	74.56	43.6	88.54	43.4	85.28	41.4
Quarrying and nonmetallic mining....	50.54	45.0	56.38	43.3	67.05	45.0	71.10	45.0	73.37	42.5
Telephone.....	44.77	37.4	51.78	38.5	58.26	39.1	65.02	38.7	65.81	38.1
Telegraph.....	53.56	44.6	62.85	44.7	68.24	44.6	74.23	41.7	74.00	41.4
Gas and electric utilities.....	56.69	41.9	63.99	41.5	72.49	41.9	80.51	41.5	81.12	41.1
Street railways and busses.....	57.14	46.8	64.61	44.9	72.23	46.3	77.12	45.1	77.58	43.5
Wholesale trade.....	51.99	41.0	57.55	40.7	64.31	40.7	71.69	40.5	72.81	40.2
Retail trade.....	40.66	40.3	45.93	40.4	50.65	40.2	55.02	39.3	55.87	39.1
Hotels (year-round).....	29.36	45.2	32.84	44.2	35.42	43.2	38.40	42.2	39.77	42.0
Laundries.....	32.71	42.6	34.98	41.5	37.81	41.1	39.69	40.5	39.90	39.9
Dyeing and cleaning.....	38.30	41.9	40.71	41.2	43.99	41.5	45.71	40.1	46.82	39.5
Private building construction.....	63.13	37.6	70.95	36.7	81.47	37.2	91.76	37.0	92.20	35.7

\* First 4 months average.



## Work Injuries in Industry (in thousands)

Sources below: U. S. Bureau of Labor Statistics.

Industry	1936	1941	1944	1947	1949	1950	1952
Manufacturing.....	312	453	787	539	381	426	450
Trade—Wholesale and retail.....	133	297	274	361	329	335	375
Public utilities.....	14	21	19	28	27	24	21
Construction.....	284	500	100	152	183	205	220
Railroads.....	38	48	92	72	46	177	190
Miscellaneous transportation.....	28	130	135	135	126		
Mining and quarrying.....	103	97	92	93	70	72	75
Services, govt. and misc.....	232	368	419	382	368	373	380
Agriculture.....	265	270	312	298	340	340	320
All industries.....	1,407	2,180	2,230	2,059	1,870	1,952	2,031

### Why Strikes?

Major issues	Percentage of total strikes			
	1948	1949	1950	1953
Wages and hours.....	50.8	46.6	52.8	55.5
Union organization, wages and hours.....	9.4	6.0	5.6	4.0
Union organization.....	13.4	15.7	13.4	10.7
Recognition.....	9.2	10.8	9.9	7.1
Strengthening bargaining position.....	.4	.5	.5	.7
Closed or union shop.....	1.8	2.2	1.8	1.7
Discrimination.....	1.3	1.8	.8	.2
Other.....	.7	.4	.4	.9
Other working conditions.....	21.5	25.0	22.0	22.3
Job security.....	10.0	12.6	12.2	9.9
Shop conditions and policies..	9.7	9.7	7.8	10.6
Work load.....	1.3	2.1	1.5	1.5
Other.....	.5	.6	.5	.3
Interunion or intraunion matters	3.8	5.8	5.3	5.4
Sympathy.....	1.3	1.4	1.0	1.3
Union rivalry or factionalism..	1.4	1.5	1.6	1.0
Jurisdiction.....	1.0	2.6	2.5	3.1
Other.....	.1	.3	.1	.1
Not reported.....	1.1	.9	.9	(1)
All issues.....	100.0	100.0	100.0	2.2

<sup>1</sup> Less than one-tenth of 1%.

### Strikes and Lockouts

Source: U. S. Bureau of Labor Statistics.

	Strikes and lockouts	Workers involved	Man-days idle
	Number	Number (thousands)	Number (thousands)
Year			
1885.....	695	258	n.a.
1890.....	1,897	373	n.a.
1895.....	1,255	407	n.a.
1900.....	1,839	568	n.a.
1905.....	2,186	302	n.a.
1915.....	1,593	n.a.	n.a.
1917.....	4,450	1,227	n.a.
1920.....	3,411	1,463	n.a.
1925.....	1,301	428	n.a.
1929.....	921	289	5,352
1930.....	637	183	3,317
1932.....	841	324	10,502
1933.....	1,695	1,168	16,872
1935.....	2,014	1,117	15,456
1939.....	2,613	1,171	17,812
1943.....	3,752	1,981	13,501
1945.....	4,750	3,470	38,025
1946.....	4,985	4,600	116,000
1948.....	3,419	1,960	34,100
1949.....	3,606	3,030	50,500
1950.....	4,843	2,410	38,800
1951.....	4,737	2,220	22,900
1952.....	5,117	3,540	59,100
1953.....	5,091	2,400	28,300

n.a. = not available.

### Industrial Production Indexes for Western Europe

Source: United Nations.

(1948 = 100)

### Termination of Strikes in 1953

Source: U. S. Bureau of Labor Statistics.

Methods of termination	Strikes (per cent of total)	Workers involved (per cent of total)
Agreement of parties reached:		
Directly.....	47.8	41.1
Assisted by non-gov't agencies & mediators.....	.5	.7
Assisted by government agencies..	34.0	45.2
Terminated without formal settlement	14.5	12.2
Employers discontinued business....	.9	.1
Not reported.....	2.3	.7

Country	1949	1950	1952	1953
Austria.....	133	157	181	184
Belgium.....	100	102	114	114
Denmark.....	106	119	117	119
France.....	110	111	131	127
Germany (Fed. Rep.)..	144	182	231	251
Greece.....	119	151	171	193
Ireland.....	113	129	130	137
Italy.....	110	127	147	161
Luxembourg.....	96	101	119	109
Netherlands.....	112	123	130	144
Norway.....	106	124	135	140
Sweden.....	104	108	111	111
United Kingdom.....	106	114	114	121

## Women Workers (in thousands)

Source: U. S. Bureau of the Census.

Note: Data prior to 1940 refers to gainful workers, not strictly comparable with current figures.

	Female workers	Total workers	Female workers as % of total		Female workers	Total workers	Female workers as % of total
1900.....	5,114	28,283	18.1	1948.....	17,583	61,442	28.6
1910.....	7,789	37,271	20.9	1950.....	18,657	63,099	29.6
1920.....	8,430	41,236	20.4	1951.....	18,515	61,005	30.3
1930.....	10,679	48,595	22.0	1952.....	18,902	61,293	30.8
1940.....	14,160	55,640	25.4	1953.....	19,017	61,894	30.7
1945.....	19,030	53,860	35.3	1954*.....	18,619	60,468	30.8

\* Average Feb.-May, Jan. unavailable.

Labor Turnover in Manufacturing Establishments  
(Monthly Average Rate Per 100 Employees)

	1929*	1932	1933	1937	1941	1943	1945	1949	1950	1951	1953	1954*
Accession rate.....	5.7	3.3	5.4	3.6	5.4	7.5	6.3	3.5	4.4	4.4	3.9	2.6
Separation rate.....	6.3	4.3	3.8	4.4	3.9	7.3	8.3	4.3	3.5	4.4	4.2	3.8
Discharges.....	.8	.2	.2	.2	.3	.6	.6	.2	.3	.3	.4	.2
Layoffs.....	2.1	3.5	2.7	3.0	1.3	.6	2.3	2.4	1.1	1.2	1.3	2.4
Quits.....	3.4	.7	.9	1.3	2.0	5.2	5.1	1.5	1.9	2.4	2.3	1.0
Miscellaneous†.....	..	..	..	..	.4	.9	.3	.1	.2	.5	.3	.2

\* Average for 7 months, June-December. † First 6 months' average, preliminary.

† Includes separations caused by death, permanent disability, retirement on pension, and extended leave. Beginning September 1940, workers leaving to enter the Army or Navy are included. Prior to January 1940, miscellaneous separations were combined with data for quits.

## U. S. Trade Agreements

Source: U. S. Tariff Commission.

Country	Signed	Effective	Country	Signed	Effective
Argentina.....	Oct. 14, 1941	Nov. 15, 1941	Iceland.....	Aug. 27, 1943	Nov. 19, 1943
Australia.....	Nov. 13, 1947	Jan. 1, 1948	India.....	June 8, 1948	July 9, 1948
Austria.....	Sept. 19, 1951	Oct. 19, 1951	Indonesia.....	Oct. 30, 1947	Mar. 11, 1948
Belgium.....	Oct. 30, 1947	Jan. 1, 1948	Iran.....	April 8, 1943	June 28, 1944
Brazil.....	June 30, 1948	July 31, 1948	Italy.....	April 30, 1950	May 30, 1950
Burma.....	June 29, 1948	July 30, 1948	Lebanon.....	Terminated	.....
Canada.....	Oct. 30, 1947	Jan. 1, 1948	Liberia.....	Terminated	.....
Ceylon.....	June 29, 1948	July 30, 1948	Luxemburg.....	Oct. 30, 1947	Jan. 1, 1948
Chile.....	Feb. 14, 1949	Mar. 16, 1949	Mexico.....	Terminated	.....
China.....	Terminated	.....	Netherlands.....	Oct. 30, 1947	Jan. 1, 1948
Colombia.....	Terminated	.....	New Zealand.....	June 30, 1948	July 31, 1948
Costa Rica.....	Terminated	.....	Nicaragua.....	April 28, 1950	May 28, 1950
Cuba.....	Dec. 17, 1947	Jan. 1, 1948	Norway.....	June 10, 1948	July 11, 1948
Czechoslovakia.....	Suspended	.....	Pakistan.....	June 30, 1948	July 31, 1948
Denmark.....	April 28, 1950	May 28, 1950	Paraguay.....	Sept. 12, 1946	April 9, 1947
Dominican Republic.....	April 19, 1950	May 19, 1950	Peru.....	Sept. 7, 1951	Oct. 8, 1951
Ecuador.....	Aug. 6, 1938	Oct. 23, 1938	Southern Rhodesia.....	June 11, 1948	July 12, 1948
El Salvador.....	Feb. 19, 1937	May 31, 1937	Sweden.....	Mar. 31, 1950	April 30, 1950
Finland.....	April 25, 1950	May 25, 1950	Switzerland.....	Jan. 9, 1936	Feb. 15, 1936
France.....	Nov. 13, 1947	Jan. 1, 1948	Syria.....	Terminated	.....
Germany (Fed. Rep.).....	Sept. 1, 1951	Oct. 1, 1951	Turkey.....	Sept. 17, 1951	Oct. 17, 1951
Greece.....	Feb. 7, 1950	Mar. 9, 1950	Union of South Africa.....	May 14, 1948	June 14, 1948
Guatemala.....	April 24, 1936	June 15, 1936	United Kingdom.....	Oct. 30, 1947	Jan. 1, 1948
Haiti.....	Oct. 10, 1949	Jan. 1, 1950	Uruguay.....	Nov. 16, 1953	Dec. 16, 1953
Honduras.....	Dec. 18, 1935	Mar. 2, 1936	Venezuela.....	Nov. 6, 1939	Dec. 16, 1939

## United States Exports of Leading Commodities

(Value in millions of dollars. Commodities in each group are listed in order of value in 1953)

Source: U. S. Department of Commerce.

Commodity	Value		
	1949	1950	1953
<b>Crude materials:</b>			
Cotton, unmanufactured.....	874	1,024	517
Tobacco, unmanufactured.....	252	250	340
Coal.....	297	269	335
<b>Foodstuffs:</b>			
Grains and preparations.....	1,457	834	1,059
Fruits and vegetables.....	189	171	242
Meats and edible animal fats.....	144	107	119
Dairy products and eggs.....	200	103	101
<b>Manufactures, including semimanufactures:</b>			
Machinery*	2,311	1,985	2,936
Industrial machinery.....	1,322	1,106	1,537
Electrical apparatus.....	437	396	803
Tractors, including parts and accessories.....	295	245	341
Agricultural implements.....	128	109	138
Automobiles, including parts and accessories†.....	730	703	1,416
Passenger automobiles, new.....	206	179	276
Motortrucks and busses, new.....	229	217	264
Chemicals and related products.....	736	708	817
Textiles and textile manufactures‡.....	656	516	640
Cotton cloth, duck and tire fabric.....	224	149	173
Petroleum products.....	463	397	693
Lubricating oils.....	169	174	179
Motor fuel and gasoline.....	146	90	178
Iron and steel mill.....	732	473	495
Ferroalloys and nonferrous metals.....	188	150	176
Rubber manufactures.....	106	81	141
Paper and manufactures.....	94	90	125
Sawmill products.....	60	49	65

\* Includes electrical apparatus, industrial machinery, office appliances, printing machinery, and agricultural machinery and implements. † Excludes service equipment 1949-50. ‡ Includes finished products and yarns and other semimanufactures.

## Imports for Consumption

(Value in millions of dollars. Commodities in each group are listed in order of value in 1953)

Source: U. S. Department of Commerce.

Commodity	Value		
	1949	1950	1953
<b>Crude materials:</b>			
Crude rubber.....	240	459	331
Wool, unmanufactured.....	222	427	295
Crude petroleum.....	341	367	502
Nonferrous ores and concentrates*.....	265	243	1,661
Vegetable fibers, except cotton.....	88	95	66
Hides and skins.....	73	118	74
Undressed furs.....	103	101	68
<b>Foodstuffs:</b>			
Coffee.....	795	1,091	1,468
Cane sugar.....	372	380	426
Fruits, edible nuts, and vegetables.....	199	215	249
Cocoa or cacao beans.....	125	167	167
Meat products.....	72	113	172
Fish, including shellfish.....	112	157	194
<b>Semimanufactures:</b>			
Nonferrous metals, total.....	571	774	1,661
Wood pulp.....	182	240	283
Steel-mill products.....	66	131	255
Sawmill products.....	112	264	236
Gas oil and fuel oil.....	127	204	234
Vegetable oils and fats, expressed and oil seeds.....	156	190	143
<b>Finished manufactures:</b>			
Paper and manufactures.....	453	473	937
Newsprint.....	438	453	595
Machinery.....	114	123	353
Wool manufactures.....	47	76	98
Cotton manufactures.....	43	65	88
Burlaps.....	103	91	76
Flax, hemp and ramie manufactures.....	31	41	34

\* Includes ores of ferroalloying metals.



## Total Exports, General Imports of Merchandise, by Countries

(Value in millions of dollars) Source: U. S. Department of Commerce.

Continent and country	Exports, including re-exports			General imports		
	1949	1950	1953	1949	1950	1953
<b>Total<sup>1</sup></b> .....	11,521.1	9,642.9	11,632.2	6,622.2	8,852.2	10,873.7
North America: Northern.....	1,919.6	1,995.8	2,995.3	1,552.4	1,961.6	2,463.0
Southern.....	1,307.3	1,418.6	1,576.0	941.3	1,139.0	1,278.5
South America.....	1,497.8	1,347.7	1,519.5	1,501.3	1,962.9	2,377.1
Europe <sup>2</sup> .....	4,044.9	2,952.4	2,868.0	980.7	1,448.9	2,334.6
Asia <sup>3</sup> .....	1,987.8	1,445.9	1,996.7	1,183.8	1,638.1	1,624.8
Oceania.....	173.3	133.2	173.3	125.4	208.1	201.8
Africa.....	590.5	349.4	503.3	337.5	493.6	594.0
<b>NORTH AND SOUTH AMERICA</b>						
Canada <sup>4</sup> .....	1,919.3	1,995.5	2,995.1	1,551.0	1,960.5	2,461.3
20 American Republics.....	2,629.6	2,626.7	2,918.3	2,301.0	2,909.8	3,442.6
Mexico.....	453.7	512.0	644.4	243.5	315.4	355.1
Central America.....	256.9	254.5	264.5	139.0	178.7	235.1
Cuba.....	374.5	456.2	426.6	387.5	406.4	431.0
Colombia.....	167.5	229.1	285.1	241.5	313.2	465.5
Venezuela.....	502.1	392.3	512.9	278.1	323.6	440.6
Peru.....	81.8	71.0	118.8	40.2	48.8	87.4
Chile.....	138.4	70.2	98.0	152.5	159.7	242.4
Brazil.....	364.5	343.1	296.0	551.8	715.3	768.4
Uruguay.....	33.3	39.4	24.5	54.0	106.1	52.5
Argentina.....	123.6	142.0	104.1	97.5	206.1	182.0
Netherlands Antilles.....	74.7	69.1	81.7	111.4	157.8	157.3
<b>EUROPE</b>						
16 OEEC countries <sup>4</sup> .....	3,885.3	2,817.2	2,863.4	842.3	1,260.4	2,295.1
Belgium and Luxemburg.....	301.5	265.9	297.4	94.2	139.8	236.0
France.....	464.2	334.4	339.1	61.5	131.7	186.5
West Germany.....	816.9	439.4	355.7	45.5	104.2	276.6
Italy.....	450.7	340.0	282.7	70.9	108.5	158.5
Netherlands.....	271.4	224.6	257.8	59.3	84.6	192.3
Sweden.....	80.7	97.0	102.2	54.4	71.3	107.8
Switzerland.....	137.9	128.0	134.4	93.1	109.7	161.4
United Kingdom.....	668.7	511.2	589.3	227.6	334.8	545.6
Turkey.....	82.8	59.1	80.2	55.7	61.5	82.1
Soviet Bloc <sup>5</sup> .....	61.8	26.7	1.8	67.4	80.6	36.3
Other Europe:						
Finland.....	26.0	20.7	22.3	27.4	34.9	42.4
Spain.....	49.2	43.6	70.4	24.3	50.3	62.7
Yugoslavia.....	19.6	39.9	108.7	14.9	18.7	32.4
<b>OTHER CONTINENTS</b>						
Western Asia <sup>6</sup> .....	337.5	218.1	268.3	114.5	152.2	204.1
Iran.....	77.0	33.2	21.4	16.4	23.6	25.4
Israel and Palestine.....	76.7	91.6	77.2	6.0	8.0	12.2
Saudi Arabia.....	81.5	32.1	76.4	19.9	24.4	66.8
Far East <sup>6</sup> .....	1,823.6	1,361.0	1,901.9	1,194.7	1,694.1	1,622.5
British Malaya.....	36.2	19.7	30.9	195.5	310.0	211.1
China.....	67.5	36.5	.....	106.4	146.0	7
Hong Kong.....	115.2	102.8	34.5	4.3	5.4	.....
Japan.....	465.9	416.4	669.5	82.0	182.1	261.5
India.....	241.4	212.5	151.5	238.8	259.1	230.1
Pakistan.....	42.0	30.4	98.4	27.7	31.4	25.7
Indonesia.....	119.5	78.5	104.1	120.4	155.7	214.5
Philippines, Republic of.....	425.6	235.0	351.2	204.7	236.0	276.0
Australia.....	124.2	100.5	134.5	97.6	141.1	137.7
New Zealand.....	40.1	26.5	31.5	24.4	64.5	59.3
Africa: Belgian Congo.....	46.4	39.8	59.6	36.3	46.0	91.2
Western British Africa.....	14.0	11.9	18.4	82.4	99.7	114.9
Egypt.....	50.1	32.1	60.3	9.4	54.5	26.3
Union of South Africa.....	257.0	119.9	207.1	116.4	141.5	92.6
Sterling area countries <sup>7</sup> .....	1,769.4	1,269.2	1,500.6	1,155.8	1,604.4	1,702.2

<sup>1</sup> Excluding "special category" exports. <sup>2</sup> Turkey is included in Europe and excluded from Asia. <sup>3</sup> Canada includes Newfoundland and Labrador. <sup>4</sup> Includes Iceland, Norway, Denmark, Ireland, Austria, Portugal, Free Territory of Trieste, and Greece, in addition to countries shown. <sup>5</sup> Includes Albania, Bulgaria, Czechoslovakia, Estonia, Hungary, Latvia, Lithuania, Poland and Danzig, Rumania and U.S.S.R. <sup>6</sup> Asia other than Western Asia plus Oceania. <sup>7</sup> Data cover trade with countries in sterling area as of March, 1954.

## Balance of Payments of the U. S., 1947-53 (in millions of dollars)

Source: Department of Commerce.

Item	1947	1948	1949	1950	1951	1952	1953
Exports of goods and services, total.....	19,754	17,058	16,033	14,396	20,282	20,661	21,265
Military transfers under aid programs, total.....	43	300	210	526	1,470	2,603	4,281
Supplies.....	38	274	188	492	1,388	2,441	4,096
Services, including freight.....	5	26	22	34	82	162	185
Other goods and services, total.....	19,711	16,758	15,823	13,870	18,812	18,058	16,984
Merchandise, adjusted.....	16,015	13,193	12,149	10,117	14,123	13,319	12,383
Transportation:							
Freight.....	1,294	893	781	532	938	791	566
Other.....	444	424	457	501	618	697	666
Travel.....	342	308	368	392	430	511	527
Miscellaneous services:							
Private.....	444	500	541	603	669	706	712
Government.....	70	100	132	132	152	206	199
Income on investment:							
Direct investments.....	869	1,064	1,112	1,294	1,492	1,419	1,463
Other private.....	167	174	185	190	192	205	216
Government.....	66	102	98	109	198	204	252
Imports of goods and services, total.....	8,162	10,295	9,661	12,053	15,068	15,688	16,424
Merchandise, adjusted (excl. military expenditures).....	5,979	7,563	6,879	9,108	11,202	10,838	10,954
Transportation:							
Freight.....	163	220	242	327	415	459	435
Other.....	420	426	458	491	559	656	623
Travel.....	548	600	678	727	722	811	895
Miscellaneous services:							
Private.....	174	196	215	229	291	300	303
Government (excl. military expenditures).....	178	211	235	250	254	277	267
Military expenditures.....	455	799	621	576	1,270	1,957	2,496
Income on investments:							
Private.....	229	263	308	314	308	326	365
Government.....	16	17	25	31	47	64	86
Balance on goods and services.....	11,592	6,763	6,372	2,343	5,214	4,973	4,841
Unilateral transfers, net, [to foreign countries (-)], total.....	-2,650	-4,807	-5,839	-4,544	-4,987	-5,137	-6,707
Private remittances.....	-664	-679	-523	-455	-411	-446	-473
Government:							
Military supplies and services.....	-43	-300	-210	-526	-1,470	-2,603	-4,281
Other grants.....	-1,897	-3,894	-4,997	-3,484	-3,035	-1,960	-1,813
Pensions and other transfers.....	-46	66	-109	-79	-71	-128	-140
Balance on goods, services, and unilateral transfers (net foreign investment).....	8,942	1,956	533	-2,201	227	-164	-1,866
United States capital, net, [outflow of funds (-)], total.....	-7,956	-1,930	-1,205	-1,421	-1,224	-1,578	-597
Private, net, total.....	-987	-906	-553	-1,265	-1,068	-1,158	-377
Direct investments net.....	-749	-721	-660	-621	-528	-850	-722
New issues.....	-396	-150	-118	-254	-491	-286	-276
Redemptions.....	295	62	103	301	113	66	139
Other long-term, net.....	52	19	-65	-542	-59	6	315
Short-term, net.....	-189	-116	187	-149	-103	-94	167
Government, net, total.....	-6,969	-1,024	-652	-156	-156	-420	-220
Long-term capital, outflow.....	-7,150	-1,555	-684	-414	-458	-847	-716
Repayments.....	294	443	205	295	305	429	485
Short-term, net.....	-113	88	-173	-37	-3	-2	11
Foreign capital, net, [outflow of funds (-)], total.....	265	352	72	1,912	578	1,612	1,106
Long-term investments in the U. S.:							
Direct and portfolio other than United States Government securities.....	-98	-172	119	{ 53	182	141	207
Transactions in United States Government securities.....				{ 941	-659	302	-82
Short-term liabilities to foreign banks and official institutions.....	363	524	-47	918	{ 613	1,083	1,021
Other short-term liabilities.....					{ 442	86	-40
Gold sales [purchases (-)].....	-2,162	-1,530	-164	1,743	-53	-379	1,163
Foreign capital and gold, total.....	-1,897	-1,178	-92	3,655	525	1,233	2,269
Errors and omissions.....	911	1,152	764	-33	472	509	194

Par Values of Member Currencies<sup>1</sup>

Source: International Monetary Fund.

Member	Currency	U. S. cents per currency unit	Currency units per U. S. dollar
Australia	Pound	224.000	0.446 429
Austria	Schilling	3.846 15	26.000 0
Belgium	Franc	2.000 00	50.000 0
Bolivia	Boliviano	0.526 316	190.000
Brazil	Cruzeiro	5.405 41	18.500 0
Burma	Kyat	21.000 0	4.761 90
Canada <sup>2</sup>	Dollar	....	....
Ceylon	Rupee	21.000 0	4.761 90
Chile	Peso	0.909 091	110.000
China	Yuan	3	3
Colombia	Peso	51.282 5	1.949 98
Costa Rica	Colón	17.809 4	5.615 00
Cuba	Peso	100.000	1.000 00
Denmark	Krone	14.477 8	6.907 14
Dominican Republic	Peso	100.000	1.000 00
Ecuador	Sucre	6.666 67	15.000 0
Egypt	Pound	287.156	0.348 242
El Salvador	Colón	40.000 0	2.500 00
Ethiopia	Dollar	40.250 0	2.484 47
Finland	Markka	0.434 783	230.000
France	Franc	3	3
Germany, Federal Republic of	Deutsche Mark	23.809 5	4.200 00
Greece	Drachma	3	3
Guatemala	Quetzal	100.000	1.000 00
Haiti	Gourde	20.000 0	5.000 00
Honduras	Lempira	50.000 0	2.000 00
Iceland	Króna	6.140 36	16.285 7
India	Rupee	21.000 0	4.761 90
Indonesia	Rupiah	3	3
Iran	Rial	3.100 78	32.250 0
Iraq	Dinar	280.000	0.357 143
Italy	Lira	3	3
Japan	Yen	0.277 778	360.000
Jordan, Hashemite Kingdom of	Dinar	280.000	0.357 143
Lebanon	Pound	45.631 3	2.191 48
Luxembourg	Franc	2.000 00	50.000 0
Mexico	Peso	8.000 00	12.500 0
Netherlands	Guilder	26.315 8	3.800 00
Nicaragua	Córdoba	20.000 0	5.000 00
Norway	Krone	14.000 0	7.142 86
Pakistan	Rupee	30.225 0	3.308 52
Panamá	Balboa	100.000	1.000 00
Paraguay	Guaraní	6.666 67	15.000 0
Peru	Sol	4	4
Philippines	Peso	50.000 0	2.000 00
Sweden	Krona	19.330 4	5.173 21
Syria	Pound	45.631 3	2.191 48
Thailand	Baht	3	3
Turkey	Lira	35.714 3	2.800 00
Union of South Africa	Pound	280.000	0.357 143
United Kingdom	Pound	280.000	0.357 143
United States	Dollar	100.000	1.000 00
Uruguay	Peso	3	3
Venezuela	Bolivar	29.850 7	3.350 00
Yugoslavia	Dinar	0.333 333	300.000

Loans of the International Bank\*  
(in millions of U. S. dollars)

Country <sup>1</sup>	Principal <sup>2</sup>	Disbursed	Undisbursed
Australia	150.0	102.5	47.5
Belgium	96.0	37.5	58.5
Brazil	145.5	98.1	47.4
Chile	17.3	14.0	3.3
Colombia	55.0	28.4	26.6
Denmark	40.0	40.0	—
El Salvador	12.5	10.5	2.0
Ethiopia	8.5	5.2	3.3
Finland	38.3	22.3	16.0
France	250.0	250.0	—
Iceland	4.3	3.4	.9
India	113.5	51.9	61.6
Iraq	12.8	5.5	7.3
Italy	10.0	8.2	1.8
Luxembourg	12.0	12.0	—
Mexico	99.8	54.1	45.7
Netherlands	229.0	217.9	11.1
Nicaragua	5.3	3.2	2.1
Pakistan	30.5	6.5	24.0
Paraguay	5.0	.7	4.3
Peru	3.8	2.0	1.8
Thailand	25.4	16.7	8.7
Turkey	50.6	7.5	43.1
U. of So. Africa	50.0	45.1	4.9
U. K. (S. & N. Rhodesia)	42.0	10.6	31.4
Uruguay	33.0	10.6	22.4
Yugoslavia	60.7	24.4	36.3
Total	1,590.8	1,103.3	487.5

<sup>1</sup> Loans are made directly to member governments and/or official institutions and private concerns. Loans not made directly to members are guaranteed by the member, or its central bank or comparable agency.  
<sup>2</sup> Principal after cancellations. \* As of June 30, 1953.

ECA and MSA Allotments\*  
(millions of dollars)

Source: Foreign Operations Administration.

Country or purpose	Cumulative total	Fiscal year		
		1948-49 <sup>1</sup>	1951 <sup>2</sup>	1953
United Kingdom	3,585.6	1,619.7	298.4	409.6
France	3,103.8	1,313.4	433.1	397.5
Italy	1,577.8	668.0	244.0	102.7
Germany (Fed. Rep.)	1,472.6	613.5	399.1	83.6
Netherlands	930.1	507.0	101.9	2.8
Indonesia	101.4	64.1	....	....
Austria	726.1	280.0	114.3	49.4
Greece	773.9	191.7	167.1	80.0
Belgium-Luxembourg	556.5	261.4	74.7	1.0
Denmark	278.9	126.2	45.1	7.5
Norway	274.7	101.1	46.1	21.2
Turkey	277.5	49.0	45.0	55.0
Ireland	146.2	86.3	15.0	....
Sweden	106.8	45.4	21.2	-0.2 <sup>3</sup>
Yugoslavia	231.0	....	29.0	121.8
Portugal	49.8	....	11.7	-0.7
Trieste (F.T.I.)	31.8	17.9	2.1	-0.8
Iceland	34.6	8.3	8.4	5.4
Freight account	55.0	....	....	21.5
E. P. U. (U. S. contribution)	361.6	....	350.0	0.2
All countries	14,726.7	5,953.0	2,405.9	1,358.6

<sup>1</sup> As of April 30, 1954. <sup>2</sup> No fixed value. <sup>3</sup> Par value not yet established. <sup>4</sup> In Nov. 1949, Peru introduced a new exchange system, but no agreement on a new par value has been reached.

<sup>1</sup> 15 months. <sup>2</sup> Includes allotments made under the Mutual Defense Assistance Program, economic assistance funds transferred to MSA/ECA beginning July 1, 1950. <sup>3</sup> Reduction in conditional aid to Sweden—a portion of Sweden's fiscal 1951 allotment. A like amount was allotted to EPU in fiscal 1953 to offset the reduction in Sweden's grant to EPU. \* April 1948-June 1953.



# SPORTS ORGANIZATIONS AND INFORMATION BUREAUS

- ALL-AMERICAN GIRLS BASEBALL LEAGUE. 462 Wrigley Bldg., Chicago 11, Ill.
- AMATEUR ATHLETIC UNION OF THE U. S. 233 Broadway, New York 7, N. Y.
- AMATEUR BICYCLE LEAGUE OF AMERICA. 2320 Grand Ave., New York 68, N. Y.
- AMATEUR FENCERS LEAGUE OF AMERICA. Room 3406, 122 E. 42d St., New York 17, N. Y.
- AMATEUR HOCKEY ASSN. OF THE U. S. Madison Square Garden, 307 W. 49th St., New York 19, N. Y.
- AMATEUR SKATING UNION OF THE U. S. Suite 916, 30 N. La Salle St., Chicago, Ill.
- AMATEUR SOFTBALL ASSN. OF AMERICA. Suite 401, 11 Hill St., Newark 2, N. J.
- AMATEUR TRAPSHOOTING ASSN. OF AMERICA. Vandalia, Ohio
- AMERICAN AUTOMOBILE ASSN. Pennsylvania Ave. at 17th St., N.W., Washington 6, D. C.
- AMERICAN BADMINTON ASSN. 47 Colburn Rd., Wellesley Hills 82, Mass.
- AMERICAN BASEBALL CONGRESS. Box 44, Battle Creek, Mich.
- AMERICAN BOWLING CONGRESS. 1572 E. Capitol Drive, Milwaukee 11, Wis.
- AMERICAN CANOE ASSN. 500 11th St., Brooklyn 15, N. Y.
- AMERICAN HOCKEY LEAGUE. Box 190, Hempstead, N. Y.
- AMERICAN HORSE SHOWS ASSN. 90 Broad St., New York 4.
- AMERICAN KENNEL CLUB. 221 Fourth Ave., New York 3.
- AMERICAN LAWN BOWLING ASSN. 10276 Orton Ave., Los Angeles 64, Calif.
- AMERICAN LEAGUE SERVICE BUREAU (Baseball). 310 S. Michigan Ave., Chicago 4, Ill.
- AMERICAN MOTORCYCLE ASSOCIATION. 106 Buttles Ave., Columbus 8, Ohio
- AMERICAN POWER BOAT ASSN. 700 Canton Ave., Detroit 7, Mich.
- AMERICAN RACING DRIVERS CLUB (midget auto racing). 309 West 50th St., New York 19, N. Y.
- AMERICAN WATER SKI ASSN. 1661 Monroe Ave., N.W., Grand Rapids, Mich.
- BASEBALL COMMISSIONER FORD C. FRICK. 30 Rockefeller Plaza, New York 20, N. Y.
- BILLIARD CONGRESS OF AMERICA. 2025 W. Fulton St., Chicago 12, Ill.
- EASTERN COLLEGE ATHLETIC CONFERENCE. Biltmore Hotel, New York 17, N. Y.
- ELIAS BASEBALL BUREAU, 11 West 42d St., New York 18
- FISH AND WILDLIFE SERVICE. Dept. of the Interior, Washington 25, D. C.
- INTERNATL. AMATEUR ATHLETIC FEDERATION. 71 St. George's Sq., London, S.W.1, England
- INTERNATIONAL GAME FISH ASSN. American Museum of Natural History, New York 24, N. Y.
- LITTLE LEAGUE BASEBALL. Williamsport, Pa.
- NATL. ARCHERY ASSN. OF THE U. S. North Pleasant St., Amherst, Mass.
- NATL. ASSN. OF AMATEUR OARSMEN. 119 Heller Parkway, Newark 4, N. J.
- NATL. ASSN. OF ANGLING AND CASTING CLUBS. 960 Paul Brown Bldg., St. Louis 1, Mo.
- NATL. ASSN. OF PROFESSIONAL BASEBALL LEAGUES (Minors). 720 E. Broad St., Columbus 15, Ohio
- NATL. ASSN. OF STATE RACING COMMISSIONERS. Box 156, Lexington, Ky.
- NATL. BASEBALL CONGRESS. Wichita 1, Kans.
- NATL. BASKETBALL ASSN. Empire State Bldg., New York 1, N. Y.
- NATL. BOXING ASSN. Room 2053, New Municipal Center, Washington 1, D. C.
- NATL. COLLEGIATE ATHLETIC ASSN. Fairfax Bldg., 11th and Baltimore, Kansas City 6, Mo.
- NATL. DUCK PIN BOWLING CONGRESS. 1420 New York Ave., N.W., Washington 5, D. C.
- NATL. FASTBALL LEAGUE. 431 S. Dearborn St., Chicago 5.
- NATL. FOOTBALL LEAGUE. 1518 Walnut St., Philadelphia 2.
- NATL. HOCKEY LEAGUE. Sun Life Bldg., Montreal, Quebec.
- NATL. HORSESHOE PITCHERS ASSN. OF AMERICA. Crestline, Calif.
- NATL. LEAGUE SERVICE BUREAU (Baseball). Carew Tower, Cincinnati 2, Ohio
- NATL. RIFLE ASSN. OF AMERICA. 1600 Rhode Island Ave., Washington 6, D. C.
- NATL. SKEET SHOOTING ASSN. Route 5, Box 595E, Dallas 9
- NATL. SKI ASSN. Box B, Barre, Mass.
- NEW YORK RACING ASSNS. SERVICE BUREAU. 250 Park Ave., New York 17, N. Y.
- NEW YORK STATE ATHLETIC (BOXING) COMMISSION. 226 W. 47th St., New York 36, N. Y.
- NORTH AMERICAN YACHT RACING UNION. 37 West 44th St., New York 18, N. Y.
- PROFESSIONAL GOLFERS' ASSN. OF AMERICA. 134 N. La Salle St., Chicago 2, Ill.
- PROFESSIONAL LAWN TENNIS ASSN. OF THE U. S. 146 E. 54th St., New York 22, N. Y.
- ROLLER SKATING RINK OPERATORS ASSN. OF AMERICA. Box 857, Detroit 31, Mich.
- THE JOCKEY CLUB. 250 Park Ave., New York 17, N. Y.
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# SPORTS

*Edited by* PETER BRANDWEIN

For 1954 sports champions and records,  
see special section beginning on Page 893.

## BASEBALL

THE POPULAR TRADITION that baseball was invented by Abner Doubleday at Cooperstown, N. Y., in 1839, has been enshrined in the Hall of Fame and National Museum of Baseball erected in that town, but research has proved that a game called "Base Ball" was played in this country and England before 1839. However, the first team baseball as we know it was played at the Elysian Fields, Hoboken, N. J., on June 19, 1846, between the Knickerbockers and the New York Nine. There was a gradual growth of baseball and an improvement of equipment and playing skill in the next fifty years. Soldiers returning home from the Civil War spread over the country the game they had learned to play in camp.

Historians have it that the first pitcher to throw a curve was William A. (Candy) Cummings in 1867. The Cincinnati Red Stockings were the first all-professional team and in 1869 they played 64 games without a loss. The standard ball of the

same size and weight, still the rule, was adopted in 1872. The first catcher's mask was worn in 1875. The National League was organized in 1876. The first chest protector was donned in 1885. The three-strike rule was put on the books in 1887 and the four-ball ticket to first base came in 1889. The pitching distance, formerly shorter, was lengthened to 60 feet 6 inches in 1893 and the rules have been only slightly modified since that time.

The American League, under the vigorous leadership of B. B. Johnson, blossomed forth as a major league in 1901. Judge Kenesaw Mountain Landis, by action of the two major leagues, became Commissioner of Baseball in 1921 and, upon his death (1944), Albert B. Chandler, former United States Senator from Kentucky, was elected to that office (1945). Chandler failed to obtain a new contract, and he was succeeded by Ford C. Frick (1951), the National League president.

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### PROFESSIONAL BASEBALL GOVERNMENT

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## Baseball Statistics

Source: The Elias Baseball Bureau, New York City.

### Record of World Series Games

(No series in 1904.)

Figures in parentheses indicate number of victories for each club. Pitchers named are winner and loser, respectively.

#### 1903—BOSTON A. L. (5) vs. PITTSBURGH N. L. (3) (Not under Brush rules)

Managers—J. J. Collins, Boston; F. C. Clarke, Pittsburgh.

Oct. 1—Pittsburgh (Phillippe).....	7	Boston (Young).....	3	At Boston
Oct. 2—Boston (Dinneen).....	3	Pittsburgh (Leever).....	0	At Boston
Oct. 3—Pittsburgh (Phillippe).....	4	Boston (Hughes).....	2	At Boston
Oct. 6—Pittsburgh (Phillippe).....	5	Boston (Dinneen).....	4	At Pittsburgh
Oct. 7—Boston (Young).....	11	Pittsburgh (Kennedy).....	2	At Pittsburgh
Oct. 8—Boston (Dinneen).....	6	Pittsburgh (Leever).....	3	At Pittsburgh
Oct. 10—Boston (Young).....	7	Pittsburgh (Phillippe).....	3	At Pittsburgh
Oct. 13—Boston (Dinneen).....	3	Pittsburgh (Phillippe).....	0	At Boston

#### 1905—NEW YORK N. L. (4) vs. PHILADELPHIA A. L. (1)

Managers—John J. McGraw, New York; Connie Mack, Philadelphia.

Oct. 9—New York (Mathewson).....	3	Philadelphia (Plank).....	0	At Philadelphia
Oct. 10—Philadelphia (Bender).....	3	New York (McGinnity).....	0	At New York
Oct. 12—New York (Mathewson).....	9	Philadelphia (Coakley).....	0	At Philadelphia
Oct. 13—New York (McGinnity).....	1	Philadelphia (Plank).....	0	At New York
Oct. 14—New York (Mathewson).....	2	Philadelphia (Bender).....	0	At New York

#### 1906—CHICAGO A. L. (4) vs. CHICAGO N. L. (2)

Managers—Fielder Jones, Chicago A. L.; Frank L. Chance, Chicago N. L.

Oct. 9—Chicago A (Altrock).....	2	Chicago N (Brown).....	1	At Chicago Nat. Pk.
Oct. 10—Chicago N (Reulbach).....	7	Chicago A (White).....	1	At Chicago Am. Pk.
Oct. 11—Chicago A (Walsh).....	3	Chicago N (Pfiester).....	0	At Chicago Nat. Pk.
Oct. 12—Chicago N (Brown).....	1	Chicago A (Altrock).....	0	At Chicago Am. Pk.
Oct. 13—Chicago A (Walsh).....	8	Chicago N (Pfiester).....	6	At Chicago Nat. Pk.
Oct. 14—Chicago A (White).....	8	Chicago N (Brown).....	3	At Chicago Am. Pk.

#### 1907—CHICAGO N. L. (4) vs. DETROIT A. L. (0)

Managers—Frank L. Chance, Chicago; Hugh Jennings, Detroit.

Oct. 8—Chicago (tie).....	3	Detroit (tie).....	3	At Chicago (12 inn.)
Oct. 9—Chicago (Pfiester).....	3	Detroit (Mullin).....	1	At Chicago
Oct. 10—Chicago (Reulbach).....	5	Detroit (Siever).....	1	At Chicago
Oct. 11—Chicago (Overall).....	6	Detroit (Donovan).....	1	At Detroit
Oct. 12—Chicago (Brown).....	2	Detroit (Mullin).....	0	At Detroit

#### 1908—CHICAGO N. L. (4) vs. DETROIT A. L. (1)

Managers—Frank L. Chance, Chicago; Hugh Jennings, Detroit.

Oct. 10—Chicago (Brown).....	10	Detroit (Summers).....	6	At Detroit
Oct. 11—Chicago (Overall).....	6	Detroit (Donovan).....	1	At Chicago
Oct. 12—Detroit (Mullin).....	8	Chicago (Pfiester).....	3	At Chicago
Oct. 13—Chicago (Brown).....	3	Detroit (Summers).....	0	At Detroit
Oct. 14—Chicago (Overall).....	2	Detroit (Donovan).....	0	At Detroit

#### 1909—PITTSBURGH N. L. (4) vs. DETROIT A. L. (3)

Managers—Fred C. Clarke, Pittsburgh; Hugh Jennings, Detroit.

Oct. 8—Pittsburgh (Adams).....	4	Detroit (Mullin).....	1	At Pittsburgh
Oct. 9—Detroit (Donovan).....	7	Pittsburgh (Camnitz).....	2	At Pittsburgh
Oct. 11—Pittsburgh (Maddox).....	8	Detroit (Summers).....	6	At Detroit
Oct. 12—Detroit (Mullin).....	5	Pittsburgh (Leifield).....	0	At Detroit
Oct. 13—Pittsburgh (Adams).....	8	Detroit (Summers).....	4	At Pittsburgh
Oct. 14—Detroit (Mullin).....	5	Pittsburgh (Willis).....	4	At Detroit
Oct. 16—Pittsburgh (Adams).....	8	Detroit (Donovan).....	0	At Detroit



**1910—PHILADELPHIA A. L. (4) vs. CHICAGO N. L. (1)**

Managers—Connie Mack, Philadelphia; Frank L. Chance, Chicago.

Oct. 17—Philadelphia (Bender).....	4	Chicago (Overall).....	1	At Philadelphia
Oct. 18—Philadelphia (Coombs).....	9	Chicago (Brown).....	3	At Philadelphia
Oct. 20—Philadelphia (Coombs).....	12	Chicago (McIntire).....	5	At Chicago
Oct. 22—Chicago (Brown).....	4	Philadelphia (Bender).....	3	At Chicago (10 inn.)
Oct. 23—Philadelphia (Coombs).....	7	Chicago (Brown).....	2	At Chicago

**1911—PHILADELPHIA A. L. (4) vs. NEW YORK N. L. (2)**

Managers—Connie Mack, Philadelphia; John J. McGraw, New York.

Oct. 14—New York (Mathewson).....	2	Philadelphia (Bender).....	1	At New York
Oct. 16—Philadelphia (Plank).....	3	New York (Marquard).....	1	At Philadelphia
Oct. 17—Philadelphia (Coombs).....	3	New York (Mathewson).....	2	At New York (11 inn.)
Oct. 24—Philadelphia (Bender).....	4	New York (Mathewson).....	2	At Philadelphia
Oct. 25—New York (Crandall).....	4	Philadelphia (Plank).....	3	At New York (10 inn.)
Oct. 26—Philadelphia (Bender).....	13	New York (Ames).....	2	At Philadelphia

**1912—BOSTON A. L. (4) vs. NEW YORK N. L. (3)**

Managers—J. Garland Stahl, Boston; John J. McGraw, New York.

Oct. 8—Boston (Wood).....	4	New York (Tesreau).....	3	At New York
Oct. 9—Boston (tie).....	6	New York (tie).....	6	At Boston (11 inn.)
Oct. 10—New York (Marquard).....	2	Boston (O'Brien).....	1	At Boston
Oct. 11—Boston (Wood).....	3	New York (Tesreau).....	1	At New York
Oct. 12—Boston (Bedient).....	2	New York (Mathewson).....	1	At Boston
Oct. 14—New York (Marquard).....	5	Boston (O'Brien).....	2	At New York
Oct. 15—New York (Tesreau).....	11	Boston (Wood).....	4	At Boston
Oct. 16—Boston (Wood).....	3	New York (Mathewson).....	2	At Boston (10 inn.)

**1913—PHILADELPHIA A. L. (4) vs. NEW YORK N. L. (1)**

Managers—Connie Mack, Philadelphia; John J. McGraw, New York.

Oct. 7—Philadelphia (Bender).....	6	New York (Marquard).....	4	At New York
Oct. 8—New York (Mathewson).....	3	Philadelphia (Plank).....	0	At Philadelphia (10 inn.)
Oct. 9—Philadelphia (Bush).....	8	New York (Tesreau).....	2	At New York
Oct. 10—Philadelphia (Bender).....	6	New York (Demaree).....	5	At Philadelphia
Oct. 11—Philadelphia (Plank).....	3	New York (Mathewson).....	1	At New York

**1914—BOSTON N. L. (4) vs. PHILADELPHIA A. L. (0)**

Managers—George T. Stallings, Boston; Connie Mack, Philadelphia.

Oct. 9—Boston (Rudolph).....	7	Philadelphia (Bender).....	1	At Philadelphia
Oct. 10—Boston (James).....	1	Philadelphia (Plank).....	0	At Philadelphia
Oct. 12—Boston (James).....	5	Philadelphia (Bush).....	4	At Boston (12 inn.)
Oct. 13—Boston (Rudolph).....	3	Philadelphia (Shawkey).....	1	At Boston

**1915—BOSTON A. L. (4) vs. PHILADELPHIA N. L. (1)**

Managers—William Carrigan, Boston; Patrick J. Moran, Philadelphia.

Oct. 8—Philadelphia (Alexander).....	3	Boston (Shore).....	1	At Philadelphia
Oct. 9—Boston (Foster).....	2	Philadelphia (Mayer).....	1	At Philadelphia
Oct. 11—Boston (Leonard).....	2	Philadelphia (Alexander).....	1	At Boston
Oct. 12—Boston (Shore).....	2	Philadelphia (Chalmers).....	1	At Boston
Oct. 13—Boston (Foster).....	5	Philadelphia (Rixey).....	4	At Philadelphia

**1916—BOSTON A. L. (4) vs. BROOKLYN N. L. (1)**

Managers—William Carrigan, Boston; Wilbert J. Robinson, Brooklyn.

Oct. 7—Boston (Shore).....	6	Brooklyn (Marquard).....	5	At Boston
Oct. 9—Boston (Ruth).....	2	Brooklyn (Smith).....	1	At Boston (14 inn.)
Oct. 10—Brooklyn (Coombs).....	4	Boston (Mays).....	3	At Brooklyn
Oct. 11—Boston (Leonard).....	6	Brooklyn (Marquard).....	2	At Brooklyn
Oct. 12—Boston (Shore).....	4	Brooklyn (Pfeffer).....	1	At Boston

**1917—CHICAGO A. L. (4) NEW YORK N. L. (2)**

Managers—Clarence H. Rowland, Chicago; John J. McGraw, New York.

Oct. 6—Chicago (Cicotte).....	2	New York (Sallee).....	1	At Chicago
Oct. 7—Chicago (Faber).....	7	New York (Anderson).....	2	At Chicago
Oct. 10—New York (Benton).....	2	Chicago (Cicotte).....	0	At New York
Oct. 11—New York (Schupp).....	5	Chicago (Faber).....	0	At New York
Oct. 13—Chicago (Faber).....	8	New York (Sallee).....	5	At Chicago
Oct. 15—Chicago (Faber).....	4	New York (Benton).....	2	At New York

**1918—BOSTON A. L. (4) vs. CHICAGO N. L. (2)**

Managers—E. G. Barrow, Boston; Fred L. Mitchell, Chicago.

Sept. 5—Boston (Ruth).....	1	Chicago (Vaughn).....	0	At Chicago
Sept. 6—Chicago (Tyler).....	3	Boston (Bush).....	1	At Chicago
Sept. 7—Boston (Mays).....	2	Chicago (Vaughn).....	1	At Chicago
Sept. 9—Boston (Ruth).....	3	Chicago (Douglas).....	2	At Boston
Sept. 10—Chicago (Vaughn).....	3	Boston (Jones).....	0	At Boston
Sept. 11—Boston (Mays).....	2	Chicago (Tyler).....	1	At Boston

**1919—CINCINNATI N. L. (5) vs. CHICAGO A. L. (3)**

Managers—Patrick J. Moran, Cincinnati; William Gleason, Chicago.

Oct. 1—Cincinnati (Ruether).....	9	Chicago (Cicotte).....	1	At Cincinnati
Oct. 2—Cincinnati (Sallee).....	4	Chicago (Williams).....	2	At Cincinnati
Oct. 3—Chicago (Kerr).....	4	Cincinnati (Fisher).....	0	At Chicago
Oct. 4—Cincinnati (Ring).....	2	Chicago (Cicotte).....	0	At Chicago
Oct. 6—Cincinnati (Eller).....	5	Chicago (Williams).....	0	At Chicago
Oct. 7—Chicago (Kerr).....	5	Cincinnati (Ring).....	4	At Cincinnati
Oct. 8—Chicago (Cicotte).....	4	Cincinnati (Sallee).....	1	At Cincinnati
Oct. 9—Cincinnati (Eller).....	10	Chicago (Williams).....	5	At Chicago (10 inn.)

**1920—CLEVELAND A. L. (5) vs. BROOKLYN N. L. (2)**

Managers—Tris Speaker, Cleveland; Wilbert J. Robinson, Brooklyn.

Oct. 5—Cleveland (Coveleskie).....	3	Brooklyn (Marquard).....	1	At Brooklyn
Oct. 6—Brooklyn (Grimes).....	3	Cleveland (Bagby).....	0	At Brooklyn
Oct. 7—Brooklyn (Smith).....	2	Cleveland (Caldwell).....	1	At Brooklyn
Oct. 9—Cleveland (Coveleskie).....	5	Brooklyn (Cadore).....	1	At Cleveland
Oct. 10—Cleveland (Bagby).....	8	Brooklyn (Grimes).....	1	At Cleveland
Oct. 11—Cleveland (Mails).....	1	Brooklyn (Smith).....	0	At Cleveland
Oct. 12—Cleveland (Coveleskie).....	3	Brooklyn (Grimes).....	0	At Cleveland

**1921—NEW YORK N. L. (5) vs. NEW YORK A. L. (3)**

Managers—John J. McGraw, New York N. L.; Miller J. Huggins, New York A. L.

Oct. 5—New York A (Mays).....	3	New York N (Nehf).....	0	At Polo Grounds
Oct. 6—New York A (Hoyt).....	3	New York N (Douglas).....	0	At Polo Grounds
Oct. 7—New York N (Barnes).....	13	New York A (Quinn).....	5	At Polo Grounds
Oct. 9—New York N (Douglas).....	4	New York A (Mays).....	2	At Polo Grounds
Oct. 10—New York A (Hoyt).....	3	New York N (Nehf).....	1	At Polo Grounds
Oct. 11—New York N (Barnes).....	8	New York A (Shawkey).....	5	At Polo Grounds
Oct. 12—New York N (Douglas).....	2	New York A (Mays).....	1	At Polo Grounds
Oct. 13—New York N (Nehf).....	1	New York A (Hoyt).....	0	At Polo Grounds

**1922—NEW YORK N. L. (4) vs. NEW YORK A. L. (0)**

Managers—John J. McGraw, New York N. L.; Miller J. Huggins, New York A. L.

Oct. 4—New York N (Ryan).....	3	New York A (Bush).....	2	At Polo Grounds
Oct. 5—New York N (tie).....	3	New York A (tie).....	3	At Polo Grounds (10 inn.)
Oct. 6—New York N (Scott).....	3	New York A (Hoyt).....	0	At Polo Grounds
Oct. 7—New York N (McQuillan).....	4	New York A (Mays).....	3	At Polo Grounds
Oct. 8—New York N (Nehf).....	5	New York A (Bush).....	3	At Polo Grounds

**1923—NEW YORK A. L. (4) vs. NEW YORK N. L. (2)**

Managers—Miller J. Huggins, New York A. L.; John J. McGraw, New York N. L.

Oct. 10—New York N (Ryan).....	5	New York A (Bush).....	4	At Yankee Stadium
Oct. 11—New York A (Pennock).....	4	New York N (McQuillan).....	2	At Polo Grounds
Oct. 12—New York N (Nehf).....	1	New York A (Jones).....	0	At Yankee Stadium
Oct. 13—New York A (Shawkey).....	8	New York N (Scott).....	4	At Polo Grounds
Oct. 14—New York A (Bush).....	8	New York N (Bentley).....	1	At Yankee Stadium
Oct. 15—New York A (Pennock).....	6	New York N (Nehf).....	4	At Polo Grounds

**1924—WASHINGTON A. L. (4) vs. NEW YORK N. L. (3)**

Managers—Stanley R. Harris, Washington; John J. McGraw, New York.

Oct. 4—New York (Nehf).....	4	Washington (Johnson).....	3	At Washington (12 inn.)
Oct. 5—Washington (Zachary).....	4	New York (Bentley).....	3	At Washington
Oct. 6—New York (McQuillan).....	6	Washington (Marberry).....	4	At New York
Oct. 7—Washington (Mogridge).....	7	New York (Barnes).....	4	At New York
Oct. 8—New York (Bentley).....	6	Washington (Johnson).....	2	At New York
Oct. 9—Washington (Zachary).....	2	New York (Nehf).....	1	At Washington
Oct. 10—Washington (Johnson).....	4	New York (Bentley).....	3	At Washington (12 inn.)

**1925—PITTSBURGH N. L. (4) vs. WASHINGTON A. L. (3)**

Managers—William B. McKechnie, Pittsburgh; Stanley R. Harris, Washington.

Oct. 7—Washington (Johnson).....	4	Pittsburgh (Meadows).....	1	At Pittsburgh
Oct. 8—Pittsburgh (Aldridge).....	3	Washington (Coveleskie).....	2	At Pittsburgh
Oct. 10—Washington (Ferguson).....	4	Pittsburgh (Kremer).....	3	At Washington
Oct. 11—Washington (Johnson).....	4	Pittsburgh (Yde).....	0	At Washington
Oct. 12—Pittsburgh (Aldridge).....	6	Washington (Coveleskie).....	3	At Washington
Oct. 13—Pittsburgh (Kremer).....	3	Washington (Ferguson).....	2	At Pittsburgh
Oct. 15—Pittsburgh (Kremer).....	9	Washington (Johnson).....	7	At Pittsburgh

**1926—ST. LOUIS N. L. (4) vs. NEW YORK A. L. (3)**

Managers—Rogers Hornsby, St. Louis; Miller J. Huggins, New York.

Oct. 2—New York (Pennock).....	2	St. Louis (Sherdel).....	1	At New York
Oct. 3—St. Louis (Alexander).....	6	New York (Shocker).....	2	At New York
Oct. 5—St. Louis (Haines).....	4	New York (Ruether).....	0	At St. Louis
Oct. 6—New York (Hoyt).....	10	St. Louis (Reinhart).....	5	At St. Louis
Oct. 7—New York (Pennock).....	3	St. Louis (Sherdel).....	2	At St. Louis (10 inn.)
Oct. 9—St. Louis (Alexander).....	10	New York (Shawkey).....	2	At New York
Oct. 10—St. Louis (Haines).....	3	New York (Hoyt).....	2	At New York

**1927—NEW YORK A. L. (4) vs. PITTSBURGH N. L. (0)**

Managers—Miller J. Huggins, New York; Owen J. Bush, Pittsburgh.

Oct. 5—New York (Hoyt).....	5	Pittsburgh (Kremer).....	4	At Pittsburgh
Oct. 6—New York (Pipgras).....	6	Pittsburgh (Aldridge).....	2	At Pittsburgh
Oct. 7—New York (Pennock).....	8	Pittsburgh (Meadows).....	1	At New York
Oct. 8—New York (Moore).....	4	Pittsburgh (Miljus).....	3	At New York

**1928—NEW YORK A. L. (4) vs. ST. LOUIS N. L. (0)**

Managers—Miller J. Huggins, New York; William B. McKechnie, St. Louis.

Oct. 4—New York (Hoyt).....	4	St. Louis (Sherdel).....	1	At New York
Oct. 5—New York (Pipgras).....	9	St. Louis (Alexander).....	3	At New York
Oct. 7—New York (Zachary).....	7	St. Louis (Haines).....	3	At St. Louis
Oct. 9—New York (Hoyt).....	7	St. Louis (Sherdel).....	3	At St. Louis

**1929—PHILADELPHIA A. L. (4) vs. CHICAGO N. L. (1)**

Managers—Connie Mack, Philadelphia; Joseph V. McCarthy, Chicago.

Oct. 8—Philadelphia (Ehmke).....	3	Chicago (Root).....	1	At Chicago
Oct. 9—Philadelphia (Earnshaw).....	9	Chicago (Malone).....	3	At Chicago
Oct. 11—Chicago (Bush).....	3	Philadelphia (Earnshaw).....	1	At Philadelphia
Oct. 12—Philadelphia (Rommel).....	10	Chicago (Blake).....	8	At Philadelphia
Oct. 14—Philadelphia (Walberg).....	3	Chicago (Malone).....	2	At Philadelphia

**1930—PHILADELPHIA A. L. (4) vs. ST. LOUIS N. L. (2)**

Managers—Connie Mack, Philadelphia; Charles E. Street, St. Louis.

Oct. 1—Philadelphia (Grove).....	5	St. Louis (Grimes).....	2	At Philadelphia
Oct. 2—Philadelphia (Earnshaw).....	6	St. Louis (Rhem).....	1	At Philadelphia
Oct. 4—St. Louis (Hallahan).....	5	Philadelphia (Walberg).....	0	At St. Louis
Oct. 5—St. Louis (Haines).....	3	Philadelphia (Grove).....	1	At St. Louis
Oct. 6—Philadelphia (Grove).....	2	St. Louis (Grimes).....	0	At St. Louis
Oct. 8—Philadelphia (Earnshaw).....	8	St. Louis (Hallahan).....	1	At Philadelphia

**1931—ST. LOUIS N. L. (4) vs. PHILADELPHIA A. L. (3)**

Managers—Charles E. Street, St. Louis; Connie Mack, Philadelphia.

Oct. 1—Philadelphia (Grove).....	6	St. Louis (Derringer).....	2	At St. Louis
Oct. 2—St. Louis (Hallahan).....	2	Philadelphia (Earnshaw).....	0	At St. Louis
Oct. 5—St. Louis (Grimes).....	5	Philadelphia (Grove).....	2	At Philadelphia
Oct. 6—Philadelphia (Earnshaw).....	3	St. Louis (Johnson).....	0	At Philadelphia
Oct. 7—St. Louis (Hallahan).....	5	Philadelphia (Hoyt).....	1	At Philadelphia
Oct. 9—Philadelphia (Grove).....	8	St. Louis (Derringer).....	1	At St. Louis
Oct. 10—St. Louis (Grimes).....	4	Philadelphia (Earnshaw).....	2	At St. Louis

**1932—NEW YORK A. L. (4) vs. CHICAGO N. L. (0)**

Managers—Joseph V. McCarthy, New York; Charles J. Grimm, Chicago.

Sept. 28—New York (Ruffing).....	12	Chicago (Bush).....	6	At New York
Sept. 29—New York (Gomez).....	5	Chicago (Warneke).....	2	At New York
Oct. 1—New York (Pipgras).....	7	Chicago (Root).....	5	At Chicago
Oct. 2—New York (Moore).....	13	Chicago (May).....	6	At Chicago



**1933—NEW YORK N. L. (4) vs. WASHINGTON A. L. (1)**

Managers—William H. Terry, New York; Joseph E. Cronin, Washington.

Oct. 3—New York (Hubbell).....	4	Washington (Stewart).....	2	At New York
Oct. 4—New York (Schumacher).....	6	Washington (Crowder).....	1	At New York
Oct. 5—Washington (Whitehill).....	4	New York (Fitzsimmons).....	0	At Washington
Oct. 6—New York (Hubbell).....	2	Washington (Weaver).....	1	At Washington (11 inn.)
Oct. 7—New York (Luque).....	4	Washington (Russell).....	3	At Washington (10 inn.)

**1934—ST. LOUIS N. L. (4) vs. DETROIT A. L. (3)**

Managers—Frank F. Frisch, St. Louis; Gordon S. Cochrane, Detroit.

Oct. 3—St. Louis (J. Dean).....	8	Detroit (Crowder).....	3	At Detroit
Oct. 4—Detroit (Rowe).....	3	St. Louis (W. Walker).....	2	At Detroit (12 inn.)
Oct. 5—St. Louis (P. Dean).....	4	Detroit (Bridges).....	1	At St. Louis
Oct. 6—Detroit (Auker).....	10	St. Louis (W. Walker).....	4	At St. Louis
Oct. 7—Detroit (Bridges).....	3	St. Louis (J. Dean).....	1	At St. Louis
Oct. 8—St. Louis (P. Dean).....	4	Detroit (Rowe).....	3	At Detroit
Oct. 9—St. Louis (J. Dean).....	11	Detroit (Auker).....	0	At Detroit

**1935—DETROIT A. L. (4) vs. CHICAGO N. L. (2)**

Managers—Gordon S. Cochrane, Detroit; Charles J. Grimm, Chicago.

Oct. 2—Chicago (Warneke).....	3	Detroit (Rowe).....	0	At Detroit
Oct. 3—Detroit (Bridges).....	8	Chicago (Root).....	3	At Detroit
Oct. 4—Detroit (Rowe).....	6	Chicago (French).....	5	At Chicago (11 inn.)
Oct. 5—Detroit (Crowder).....	2	Chicago (Carleton).....	1	At Chicago
Oct. 6—Chicago (Warneke).....	3	Detroit (Rowe).....	1	At Chicago
Oct. 7—Detroit (Bridges).....	4	Chicago (French).....	3	At Detroit

**1936—NEW YORK A. L. (4) vs. NEW YORK N. L. (2)**

Managers—Joseph V. McCarthy, Yankees; William H. Terry, Giants.

Sept. 30—Giants (Hubbell).....	6	Yankees (Ruffing).....	1	At Polo Grounds
Oct. 2—Yankees (Gomez).....	18	Giants (Schumacher).....	4	At Polo Grounds
Oct. 3—Yankees (Hadley).....	2	Giants (Fitzsimmons).....	1	At Yankee Stadium
Oct. 4—Yankees (Pearson).....	5	Giants (Hubbell).....	2	At Yankee Stadium
Oct. 5—Giants (Schumacher).....	5	Yankees (Malone).....	4	At Yankee Stadium (10 inn.)
Oct. 6—Yankees (Gomez).....	13	Giants (Fitzsimmons).....	5	At Polo Grounds

**1937—NEW YORK A. L. (4) vs. NEW YORK N. L. (1)**

Managers—Joseph V. McCarthy, Yankees; William H. Terry, Giants.

Oct. 6—Yankees (Gomez).....	8	Giants (Hubbell).....	1	At Yankee Stadium
Oct. 7—Yankees (Ruffing).....	8	Giants (Melton).....	1	At Yankee Stadium
Oct. 8—Yankees (Pearson).....	5	Giants (Schumacher).....	1	At Polo Grounds
Oct. 9—Giants (Hubbell).....	7	Yankees (Hadley).....	3	At Polo Grounds
Oct. 10—Yankees (Gomez).....	4	Giants (Melton).....	2	At Polo Grounds

**1938—NEW YORK A. L. (4) vs. CHICAGO N. L. (0)**

Managers—Joseph V. McCarthy, New York; Charles L. Hartnett, Chicago.

Oct. 5—New York (Ruffing).....	3	Chicago (Lee).....	1	At Chicago
Oct. 6—New York (Gomez).....	6	Chicago (Dean).....	3	At Chicago
Oct. 8—New York (Pearson).....	5	Chicago (Bryant).....	2	At New York
Oct. 9—New York (Ruffing).....	8	Chicago (Lee).....	3	At New York

**1939—NEW YORK A. L. (4) vs. CINCINNATI N. L. (0)**

Managers—Joseph V. McCarthy, New York; William B. McKechnie, Cincinnati.

Oct. 4—New York (Ruffing).....	2	Cincinnati (Derringer).....	1	At New York
Oct. 5—New York (Pearson).....	4	Cincinnati (Walters).....	0	At New York
Oct. 7—New York (Hadley).....	7	Cincinnati (Thompson).....	3	At Cincinnati
Oct. 8—New York (Murphy).....	7	Cincinnati (Walters).....	4	At Cincinnati (10 inn.)

**1940—CINCINNATI N. L. (4) vs. DETROIT A. L. (3)**

Managers—William B. McKechnie, Cincinnati; Delmar D. Baker, Detroit.

Oct. 2—Detroit (Newsom).....	7	Cincinnati (Derringer).....	2	At Cincinnati
Oct. 3—Cincinnati (Walters).....	5	Detroit (Rowe).....	3	At Cincinnati
Oct. 4—Detroit (Bridges).....	7	Cincinnati (Turner).....	4	At Detroit
Oct. 5—Cincinnati (Derringer).....	5	Detroit (Trout).....	2	At Detroit
Oct. 6—Detroit (Newsom).....	8	Cincinnati (Thompson).....	0	At Detroit
Oct. 7—Cincinnati (Walters).....	4	Detroit (Rowe).....	0	At Cincinnati
Oct. 8—Cincinnati (Derringer).....	2	Detroit (Newsom).....	1	At Cincinnati

**1941—NEW YORK A. L. (4) vs. BROOKLYN N. L. (1)**

Managers—Joseph V. McCarthy, New York; Leo E. Durocher, Brooklyn.

Oct. 1—New York (Ruffing).....	3	Brooklyn (Davis).....	2	At New York
Oct. 2—Brooklyn (Wyatt).....	3	New York (Chandler).....	2	At New York
Oct. 4—New York (Russo).....	2	Brooklyn (Casey).....	1	At Brooklyn
Oct. 5—New York (Murphy).....	7	Brooklyn (Casey).....	4	At Brooklyn
Oct. 6—New York (Bonham).....	3	Brooklyn (Wyatt).....	1	At Brooklyn

**1942—ST. LOUIS N. L. (4) vs. NEW YORK A. L. (1)**

Managers—William H. Southworth, St. Louis; Joseph V. McCarthy, New York.

Sept. 30—New York (Ruffing).....	7	St. Louis (M. Cooper).....	4	At St. Louis
Oct. 1—St. Louis (Beazley).....	4	New York (Bonham).....	3	At St. Louis
Oct. 3—St. Louis (White).....	2	New York (Chandler).....	0	At New York
Oct. 4—St. Louis (Lanier).....	9	New York (Donald).....	6	At New York
Oct. 5—St. Louis (Beazley).....	4	New York (Ruffing).....	2	At New York

**1943—NEW YORK A. L. (4) vs. ST. LOUIS N. L. (1)**

Managers—Joseph V. McCarthy, New York; William H. Southworth, St. Louis.

Oct. 5—New York (Chandler).....	4	St. Louis (Lanier).....	2	At New York
Oct. 6—St. Louis (M. Cooper).....	4	New York (Bonham).....	3	At New York
Oct. 7—New York (Borowy).....	6	St. Louis (Brazle).....	2	At New York
Oct. 10—New York (Russo).....	2	St. Louis (Brecheen).....	1	At St. Louis
Oct. 11—New York (Chandler).....	2	St. Louis (M. Cooper).....	0	At St. Louis

**1944—ST. LOUIS N. L. (4) vs. ST. LOUIS A. L. (2)**

Managers—William H. Southworth, Cardinals; J. Luther Sewell, Browns.

Oct. 4—Browns (Galehouse).....	2	Cardinals (M. Cooper).....	1	At Sportsman's Park
Oct. 5—Cardinals (Donnelly).....	3	Browns (Muncie).....	2	At Sportsman's Pk. (11 inn.)
Oct. 6—Browns (Kramer).....	6	Cardinals (Wilks).....	2	At Sportsman's Park
Oct. 7—Cardinals (Brecheen).....	5	Browns (Jakucki).....	1	At Sportsman's Park
Oct. 8—Cardinals (M. Cooper).....	2	Browns (Galehouse).....	0	At Sportsman's Park
Oct. 9—Cardinals (Lanier).....	3	Browns (Potter).....	1	At Sportsman's Park

**1945—DETROIT A. L. (4) vs. CHICAGO N. L. (3)**

Managers—Stephen F. O'Neill, Detroit; Charles J. Grimm, Chicago.

Oct. 3—Chicago (Borowy).....	9	Detroit (Newhouse).....	0	At Detroit
Oct. 4—Detroit (Trucks).....	4	Chicago (Wyse).....	1	At Detroit
Oct. 5—Chicago (Passeau).....	3	Detroit (Overmire).....	0	At Detroit
Oct. 6—Detroit (Trout).....	4	Chicago (Prim).....	1	At Chicago
Oct. 7—Detroit (Newhouse).....	8	Chicago (Borowy).....	4	At Chicago
Oct. 8—Chicago (Borowy).....	8	Detroit (Trout).....	7	At Chicago (12 inn.)
Oct. 10—Detroit (Newhouse).....	9	Chicago (Borowy).....	3	At Chicago

**1946—ST. LOUIS N. L. (4) vs. BOSTON A. L. (3)**

Managers—Edwin H. Dyer, St. Louis; Joseph E. Cronin, Boston.

Oct. 6—Boston (Johnson).....	3	St. Louis (Pollet).....	2	At St. Louis (10 innings)
Oct. 7—St. Louis (Brecheen).....	3	Boston (Harris).....	0	At St. Louis
Oct. 9—Boston (Ferriss).....	4	St. Louis (Dickson).....	0	At Boston
Oct. 10—St. Louis (Munger).....	12	Boston (Hughson).....	3	At Boston
Oct. 11—Boston (Dobson).....	6	St. Louis (Brazle).....	3	At Boston
Oct. 13—St. Louis (Brecheen).....	4	Boston (Harris).....	1	At St. Louis
Oct. 15—St. Louis (Brecheen).....	4	Boston (Klinger).....	3	At St. Louis

**1947—NEW YORK A. L. (4) vs. BROOKLYN N. L. (3)**

Managers—Stanley R. Harris, New York; Burton E. Shotton, Brooklyn.

Sept. 30—New York (Shea).....	5	Brooklyn (Branca).....	3	At New York
Oct. 1—New York (Reynolds).....	10	Brooklyn (Lombardi).....	3	At New York
Oct. 2—Brooklyn (Casey).....	9	New York (Newsom).....	8	At Brooklyn
Oct. 3—Brooklyn (Casey).....	3	New York (Bevens).....	2	At Brooklyn
Oct. 4—New York (Shea).....	2	Brooklyn (Barney).....	1	At Brooklyn
Oct. 5—Brooklyn (Branca).....	8	New York (Page).....	6	At New York
Oct. 6—New York (Page).....	5	Brooklyn (Gregg).....	2	At New York

**1948—CLEVELAND A. L. (4) vs. BOSTON N. L. (2)**

Managers—Louis Boudreau, Cleveland; William H. Southworth, Boston.

Oct. 6—Boston (Sain).....	1	Cleveland (Feller).....	0	At Boston
Oct. 7—Cleveland (Lemon).....	4	Boston (Spahn).....	1	At Boston
Oct. 8—Cleveland (Bearden).....	2	Boston (Bickford).....	0	At Cleveland
Oct. 9—Cleveland (Gromek).....	2	Boston (Sain).....	1	At Cleveland
Oct. 10—Boston (Spahn).....	11	Cleveland (Feller).....	5	At Cleveland
Oct. 11—Cleveland (Lemon).....	4	Boston (Voiselle).....	3	At Boston

1949—NEW YORK A. L. (4) vs. BROOKLYN N. L. (1)

Managers—Charles D. Stengel, New York; Burton E. Shotton, Brooklyn.

Oct. 5—New York (Reynolds).....	1	Brooklyn (Newcombe).....	0	At New York
Oct. 6—Brooklyn (Roe).....	1	New York (Raschi).....	0	At New York
Oct. 7—New York (Page).....	4	Brooklyn (Branca).....	3	At Brooklyn
Oct. 8—New York (Lopat).....	6	Brooklyn (Newcombe).....	4	At Brooklyn
Oct. 9—New York (Raschi).....	10	Brooklyn (Barney).....	6	At Brooklyn

1950—NEW YORK A. L. (4) vs. PHILADELPHIA N. L. (0)

Managers—Charles D. Stengel, New York; Edwin M. Sawyer, Philadelphia.

Oct. 4—New York (Raschi).....	1	Philadelphia (Konstanty).....	0	At Philadelphia
Oct. 5—New York (Reynolds).....	2	Philadelphia (Roberts).....	1	At Philadelphia (10 inn.)
Oct. 6—New York (Ferrick).....	3	Philadelphia (Meyer).....	2	At New York
Oct. 7—New York (Ford).....	5	Philadelphia (Miller).....	2	At New York

1951—NEW YORK A. L. (4) vs. NEW YORK N. L. (2)

Managers—Charles D. Stengel, Yankees; Leo E. Durocher, Giants.

Oct. 4—Giants (Koslo).....	5	Yankees (Reynolds).....	1	At Yankee Stadium
Oct. 5—Yankees (Lopat).....	3	Giants (Jansen).....	1	At Yankee Stadium
Oct. 6—Giants (Hearn).....	6	Yankees (Raschi).....	2	At Polo Grounds
Oct. 8—Yankees (Reynolds).....	6	Giants (Maglie).....	2	At Polo Grounds
Oct. 9—Yankees (Lopat).....	13	Giants (Jansen).....	1	At Polo Grounds
Oct. 10—Yankees (Raschi).....	4	Giants (Koslo).....	3	At Yankee Stadium

1952—NEW YORK A. L. (4) vs. BROOKLYN N. L. (3)

Managers—Charles D. Stengel, New York; Charles W. Dressen, Brooklyn.

Oct. 1—Brooklyn (Black).....	4	New York (Reynolds).....	2	At Brooklyn
Oct. 2—New York (Raschi).....	7	Brooklyn (Erskine).....	1	At Brooklyn
Oct. 3—Brooklyn (Roe).....	5	New York (Lopat).....	3	At New York
Oct. 4—New York (Reynolds).....	2	Brooklyn (Black).....	0	At New York
Oct. 5—Brooklyn (Erskine).....	6	New York (Sain).....	5	At New York (12 inns.)
Oct. 6—New York (Raschi).....	3	Brooklyn (Loes).....	2	At Brooklyn
Oct. 7—New York (Reynolds).....	4	Brooklyn (Black).....	2	At Brooklyn

1953—NEW YORK A. L. (4) vs. BROOKLYN N. L. (2)

Managers—Charles D. Stengel, New York; Charles W. Dressen, Brooklyn.

Sept. 30—New York (Sain).....	9	Brooklyn (Labine).....	5	At New York
Oct. 1—New York (Lopat).....	4	Brooklyn (Roe).....	2	At New York
Oct. 2—Brooklyn (Erskine).....	3	New York (Raschi).....	2	At Brooklyn
Oct. 3—Brooklyn (Loes).....	7	New York (Ford).....	3	At Brooklyn
Oct. 4—New York (McDonald).....	11	Brooklyn (Podres).....	7	At Brooklyn
Oct. 5—New York (Reynolds).....	4	Brooklyn (Labine).....	3	At New York

(For 1954 World Series statistics see index.)

World Series Club Standing  
(Through 1953)

	Series	Won	Lost	Pct.
Cleveland (A) ....	2	2	0	1.000
Boston (A) ....	6	5	1	.833
New York (A) ....	20	16	4	.800
St. Louis (N) ....	9	6	3	.667
Cincinnati (N) ...	3	2	1	.667
Chicago (A) ....	3	2	1	.667
Philadelphia (A) .	8	5	3	.625
Boston (N) ....	2	1	1	.500
Pittsburgh (N) ...	4	2	2	.500
Washington (A) ..	3	1	2	.333
New York (N) ....	13	4	9	.308
Detroit (A) ....	7	2	5	.286
Chicago (N) ....	10	2	8	.200
St. Louis (A) ....	1	0	1	.000
Philadelphia (N) .	2	0	2	.000
Brooklyn (N) ....	7	0	7	.000

RUTH'S BASEBALL EARNINGS

Year	Club	Salary
1914	Baltimore (I) .....	\$ 600
1914*	Boston (A) .....	1,300
1915	Boston (A) .....	3,500
1916	Boston (A) .....	3,500
1917	Boston (A) .....	5,000
1918	Boston (A) .....	7,000
1919	Boston (A) .....	10,000
1920	New York (A) .....	20,000
1921	New York (A) .....	30,000
1922	New York (A) .....	52,000
1923	New York (A) .....	52,000
1924	New York (A) .....	52,000
1925	New York (A) .....	52,000
1926	New York (A) .....	52,000
1927	New York (A) .....	70,000
1928	New York (A) .....	70,000
1929	New York (A) .....	70,000
1930	New York (A) .....	80,000
1931	New York (A) .....	80,000
1932	New York (A) .....	80,000
1933	New York (A) .....	50,000
1934	New York (A) .....	35,000
1935	Boston (N) .....	40,000
1938†	Brooklyn (N) .....	15,000
Total .....		\$925,900

RECAPITULATION

	Won
American League .....	33
National League .....	17

\* Bought by Boston Americans from Baltimore and farmed to Providence (I). † Coach.

Ruth's share from ten world series amounted to \$1445. In addition, he was reputed to have made \$1,000,000 from endorsements, barnstorming tours, movies and radio appearances.



## National League Pennant Winners

Year	Club	Manager	Won	Lost	Pct.	Year	Club	Manager	Won	Lost	Pct.
1876	Chicago.....	Albert G. Spalding.....	52	14	.788	1915	Philadelphia.....	Patrick J. Moran.....	90	62	.592
1877	Boston.....	Harry Wright.....	31	17	.646	1916	Brooklyn.....	Wilbert Robinson.....	94	60	.610
1878	Boston.....	Harry Wright.....	41	19	.683	1917	New York.....	John J. McGraw.....	98	56	.636
1879	Providence.....	George Wright.....	59	25	.702	1918	Chicago.....	Fred L. Mitchell.....	84	45	.661
1880	Chicago.....	Adrian C. Anson.....	67	17	.798	1919*	Cincinnati.....	Patrick J. Moran.....	96	44	.686
1881	Chicago.....	Adrian C. Anson.....	56	28	.667	1920	Brooklyn.....	Wilbert Robinson.....	93	61	.604
1882	Chicago.....	Adrian C. Anson.....	55	29	.655	1921*	New York.....	John J. McGraw.....	94	59	.614
1883	Boston.....	John F. Morrill.....	63	35	.643	1922*	New York.....	John J. McGraw.....	93	61	.604
1884	Providence.....	Frank C. Bancroft.....	84	28	.750	1923	New York.....	John J. McGraw.....	95	58	.621
1885	Chicago.....	Adrian C. Anson.....	87	25	.777	1924	New York.....	John J. McGraw.....	93	60	.608
1886	Chicago.....	Adrian C. Anson.....	90	34	.726	1925*	Pittsburgh.....	William B. McKechnie.....	95	58	.621
1887	Detroit.....	W. H. Watkins.....	79	45	.637	1926*	St. Louis.....	Rogers Hornsby.....	89	65	.578
1888	New York.....	James J. Mutrie.....	84	47	.641	1927	Pittsburgh.....	Owen J. Bush.....	94	60	.610
1889	New York.....	James J. Mutrie.....	83	43	.659	1928	St. Louis.....	William B. McKechnie.....	95	59	.617
1890	Brooklyn.....	William H. McGunnigle.....	86	43	.667	1929	Chicago.....	Joseph V. McCarthy.....	98	54	.645
1891	Boston.....	Frank G. Selee.....	87	51	.630	1930	St. Louis.....	Charles E. Street.....	92	62	.597
1892	Boston.....	Frank G. Selee.....	102	48	.680	1931*	St. Louis.....	Charles E. Street.....	101	53	.656
1893	Boston.....	Frank G. Selee.....	86	43	.667	1932	Chicago.....	Charles J. Grimm.....	90	64	.584
1894	Baltimore.....	Edward H. Hanlon.....	89	39	.695	1933*	New York.....	William H. Terry.....	91	61	.599
1895	Baltimore.....	Edward H. Hanlon.....	87	43	.669	1934*	St. Louis.....	Frank F. Frisch.....	95	58	.621
1896	Baltimore.....	Edward H. Hanlon.....	90	39	.698	1935	Chicago.....	Charles J. Grimm.....	100	54	.649
1897	Boston.....	Frank G. Selee.....	93	39	.705	1936	New York.....	William H. Terry.....	92	62	.597
1898	Boston.....	Frank G. Selee.....	102	47	.685	1937	New York.....	William H. Terry.....	95	57	.625
1899	Brooklyn.....	Edward H. Hanlon.....	88	42	.677	1938	Chicago.....	Charles L. Hartnett.....	89	63	.586
1900	Brooklyn.....	Edward H. Hanlon.....	82	54	.603	1939	Cincinnati.....	William B. McKechnie.....	97	57	.630
1901	Pittsburgh.....	Fred C. Clarke.....	90	49	.647	1940*	Cincinnati.....	William B. McKechnie.....	100	53	.654
1902	Pittsburgh.....	Fred C. Clarke.....	103	36	.741	1941	Brooklyn.....	Leo E. Durocher.....	100	54	.649
1903	Pittsburgh.....	Fred C. Clarke.....	91	49	.650	1942*	St. Louis.....	William H. Southworth.....	106	48	.688
1904	New York.....	John J. McGraw.....	106	47	.693	1943	St. Louis.....	William H. Southworth.....	105	49	.682
1905*	New York.....	John J. McGraw.....	105	48	.686	1944*	St. Louis.....	William H. Southworth.....	105	49	.682
1906	Chicago.....	Frank L. Chance.....	116	36	.763	1945	Chicago.....	Charles J. Grimm.....	98	56	.636
1907*	Chicago.....	Frank L. Chance.....	107	45	.704	1946*	St. Louis.....	Edwin H. Dyer.....	98	58	.628
1908*	Chicago.....	Frank L. Chance.....	99	55	.643	1947	Brooklyn.....	Burton E. Shotton.....	94	60	.610
1909*	Pittsburgh.....	Fred C. Clarke.....	110	42	.724	1948	Boston.....	William H. Southworth.....	91	62	.595
1910	Chicago.....	Frank L. Chance.....	104	50	.675	1949	Brooklyn.....	Burton E. Shotton.....	97	57	.630
1911	New York.....	John J. McGraw.....	99	54	.647	1950	Philadelphia.....	Edwin M. Sawyer.....	91	63	.591
1912	New York.....	John J. McGraw.....	103	48	.682	1951	New York.....	Leo E. Durocher.....	98	59	.624
1913	New York.....	John J. McGraw.....	101	51	.664	1952	Brooklyn.....	Charles W. Dressen.....	96	57	.627
1914*	Boston.....	George T. Stallings.....	94	59	.614	1953	Brooklyn.....	Charles W. Dressen.....	99	52	.656

\* World Series winner.

## American League Pennant Winners

1901	Chicago.....	Clark C. Griffith.....	83	53	.610	1928*	New York.....	Miller J. Huggins.....	101	53	.656
1902	Philadelphia.....	Connie Mack.....	83	53	.610	1929*	Philadelphia.....	Connie Mack.....	104	46	.693
1903*	Boston.....	James J. Collins.....	91	47	.659	1930*	Philadelphia.....	Connie Mack.....	102	52	.662
1904	Boston.....	James J. Collins.....	95	59	.617	1931	Philadelphia.....	Connie Mack.....	107	45	.704
1905	Philadelphia.....	Connie Mack.....	92	56	.622	1932*	New York.....	Joseph V. McCarthy.....	107	47	.695
1906*	Chicago.....	Fielder A. Jones.....	93	58	.616	1933	Washington.....	Joseph E. Cronin.....	99	53	.651
1907	Detroit.....	Hugh A. Jennings.....	92	58	.613	1934	Detroit.....	Gordon S. Cochrane.....	101	53	.656
1908	Detroit.....	Hugh A. Jennings.....	90	63	.588	1935*	Detroit.....	Gordon S. Cochrane.....	93	58	.616
1909	Detroit.....	Hugh A. Jennings.....	98	54	.645	1936*	New York.....	Joseph V. McCarthy.....	102	51	.667
1910*	Philadelphia.....	Connie Mack.....	102	48	.680	1937*	New York.....	Joseph V. McCarthy.....	102	52	.662
1911*	Philadelphia.....	Connie Mack.....	101	50	.669	1938*	New York.....	Joseph V. McCarthy.....	99	53	.651
1912*	Boston.....	J. Garland Stahl.....	105	47	.691	1939*	New York.....	Joseph V. McCarthy.....	106	45	.702
1913*	Philadelphia.....	Connie Mack.....	96	57	.627	1940	Detroit.....	Delmar D. Baker.....	90	64	.584
1914	Philadelphia.....	Connie Mack.....	99	53	.651	1941*	New York.....	Joseph V. McCarthy.....	101	53	.656
1915*	Boston.....	William F. Carrigan.....	101	50	.669	1942	New York.....	Joseph V. McCarthy.....	103	51	.669
1916*	Boston.....	William F. Carrigan.....	91	63	.591	1943*	New York.....	Joseph V. McCarthy.....	98	56	.636
1917*	Chicago.....	Clarence H. Rowland.....	100	54	.649	1944	St. Louis.....	James L. Sewell.....	89	65	.578
1918*	Boston.....	Edward G. Barrow.....	75	51	.595	1945*	Detroit.....	Stephen F. O'Neill.....	88	65	.575
1919	Chicago.....	William Gleason.....	88	52	.629	1946	Boston.....	Joseph E. Cronin.....	104	50	.675
1920*	Cleveland.....	Tris E. Speaker.....	98	56	.636	1947*	New York.....	Stanley R. Harris.....	97	57	.630
1921	New York.....	Miller J. Huggins.....	98	55	.641	1948*	Cleveland.....	Louis Boudreau.....	97	58	.626
1922	New York.....	Miller J. Huggins.....	94	60	.610	1949*	New York.....	Charles D. Stengel.....	97	57	.630
1923*	New York.....	Miller J. Huggins.....	98	54	.645	1950*	New York.....	Charles D. Stengel.....	98	56	.636
1924*	Washington.....	Stanley R. Harris.....	92	62	.597	1951*	New York.....	Charles D. Stengel.....	98	56	.636
1925	Washington.....	Stanley R. Harris.....	96	55	.636	1952*	New York.....	Charles D. Stengel.....	95	59	.617
1926	New York.....	Miller J. Huggins.....	91	63	.591	1953	New York.....	Charles D. Stengel.....	105	49	.682
1927*	New York.....	Miller J. Huggins.....	110	44	.714						

\* World Series winner

## National League Batting Champions

Year	Avg.	Year	Avg.	Year	Avg.
1876—R. Barnes, Chi.	403	1902—C. H. Beaumont, Pitts.	357	1928—Rogers Hornsby, Bos.	387
1877—J. L. White, Bos.	385	1903—J. P. Wagner, Pitts.	355	1929—Frank J. O'Doul, Phila.	398
1878—A. Dalrymple, Mil.	356	1904—J. P. Wagner, Pitts.	349	1930—Wm. H. Terry, N. Y.	401
1879—A. C. Anson, Chi.	407	1905—J. B. Seymour, Cin.	377	1931—C. J. Hafey, St. L.	349
1880—G. F. Gore, Chi.	365	1906—J. P. Wagner, Pitts.	339	1932—F. J. O'Doul, Bklyn.	368
1881—A. C. Anson, Chi.	399	1907—J. P. Wagner, Pitts.	350	1933—C. H. Klein, Phila.	368
1882—D. Brouthers, Buf.	367	1908—J. P. Wagner, Pitts.	354	1934—P. G. Waner, Pitts.	362
1883—D. Brouthers, Buf.	371	1909—J. P. Wagner, Pitts.	339	1935—F. Vaughan, Pitts.	385
1884—J. O'Rourke, Buf.	350	1910—S. N. Magee, Phila.	331	1936—P. G. Waner, Pitts.	373
1885—R. Connor, N. Y.	371	1911—J. P. Wagner, Pitts.	334	1937—J. M. Medwick, St. L.	374
1886—M. J. Kelly, Chi.	388	1912—H. Zimmerman, Chi.	372	1938—E. N. Lombardi, Cin.	342
1887—A. C. Anson, Chi.	421	1913—J. Daubert, Bklyn.	350	1939—J. R. Mize, St. L.	349
1888—A. C. Anson, Chi.	343	1914—J. Daubert, Bklyn.	329	1940—D. Garmes, Pitts.	355
1889—D. Brouthers, Bos.	373	1915—L. Doyle, N. Y.	320	1941—H. P. Reiser, Bklyn.	343
1890—J. Glasscock, N. Y.	336	1916—H. Chase, Cin.	339	1942—E. N. Lombardi, Bos.	330
1891—W. Hamilton, Phila.	338	1917—E. J. Roush, Cin.	341	1943—S. F. Musial, St. L.	357
1892—C. Childs, Cleve.	335	1918—Z. D. Wheat, Bklyn.	335	1944—F. Walker, Bklyn.	357
1892—D. Brouthers, Bklyn.	335	1919—E. J. Roush, Cin.	321	1945—P. J. Cavarretta, Chicago	355
1893—Hugh Duffy, Bos.	378	1920—Rogers Hornsby, St. L.	370	1946—S. F. Musial, St. L.	365
1894—Hugh Duffy, Bos.	438	1921—Rogers Hornsby, St. L.	397	1947—H. W. Walker, Phila.	363
1895—J. Burkett, Cleve.	423	1922—Rogers Hornsby, St. L.	401	1948—S. F. Musial, St. L.	376
1896—J. Burkett, Cleve.	410	1923—Rogers Hornsby, St. L.	384	1949—J. R. Robinson, Bklyn.	342
1897—W. Keeler, Balt.	432	1924—Rogers Hornsby, St. L.	424	1950—S. F. Musial, St. L.	346
1898—W. Keeler, Balt.	379	1925—Rogers Hornsby, St. L.	403	1951—S. F. Musial, St. L.	355
1899—E. J. Delahanty, Phila.	408	1926—Eugene Hargrave, Cin.	353	1952—S. F. Musial, St. Louis.	336
1900—J. P. Wagner, Pitts.	380	1927—Paul G. Waner, Pitts.	380	1953—C. A. Furillo, Bklyn.	344
1901—J. Burkett, St. L.	382				

## American League Batting Champions

1901—N. Lajoie, Phila.	405	1919—T. R. Cobb, Det.	384	1937—C. L. Gehringer, Det.	371
1902—E. J. Delahanty, Wash.	376	1920—G. H. Sisler, St. L.	407	1938—J. E. Foxx, Bos.	349
1903—N. Lajoie, Cleve.	355	1921—H. E. Heilmann, Det.	394	1939—J. P. DiMaggio, N. Y.	381
1904—N. Lajoie, Cleve.	381	1922—G. H. Sisler, St. L.	420	1940—J. P. DiMaggio, N. Y.	352
1905—Elmer Flick, Cleve.	306	1923—H. E. Heilmann, Det.	403	1941—T. S. Williams, Bos.	406
1906—G. Stone, St. L.	358	1924—G. H. Ruth, N. Y.	378	1942—T. S. Williams, Bos.	356
1907—T. R. Cobb, Det.	350	1925—H. E. Heilmann, Det.	393	1943—L. B. Appling, Chi.	328
1908—T. R. Cobb, Det.	324	1926—H. E. Manush, Det.	378	1944—L. Boudreau, Cleve.	327
1909—T. R. Cobb, Det.	377	1927—H. E. Heilmann, Det.	398	1945—G. H. Starnweiss, N. Y.	309
1910—T. R. Cobb, Det.	385	1928—L. A. Goslin, Wash.	379	1946—J. B. Vernon, Wash.	353
1911—T. R. Cobb, Det.	420	1929—L. A. Fonseca, Cleve.	369	1947—T. S. Williams, Bos.	343
1912—T. R. Cobb, Det.	410	1930—A. H. Simmons, Phila.	381	1948—T. S. Williams, Bos.	369
1913—T. R. Cobb, Det.	390	1931—A. H. Simmons, Phila.	390	1949—G. Kell, Det.	343
1914—T. R. Cobb, Det.	368	1932—D. Alexander, Det.-Bos.	367	1950—W. D. Goodman, Bos.	354
1915—T. R. Cobb, Det.	369	1933—J. E. Foxx, Phila.	356	1951—Ferris Fain, Phila.	344
1916—T. Speaker, Cleve.	386	1934—H. L. Gehrig, N. Y.	363	1952—Ferris Fain, Phila.	327
1917—T. R. Cobb, Det.	383	1935—C. S. Myer, Wash.	349	1953—J. B. Vernon, Wash.	337
1918—T. R. Cobb, Det.	382	1936—L. B. Appling, Chi.	388		

## National Baseball Congress Champions

1935—Bismarck (N. D.) Corwin-Churchill
1936—Duncan (Okla.) Halliburtons
1937—Enid (Okla.) Eason Oilers
1938—Buford (Ga.) Bona Alfens
1939—Duncan (Okla.) Halliburtons
1940—Enid (Okla.) Champlins
1941—Enid (Okla.) Champlins
1942—Wichita (Kans.) Boeing Bombers
1943—Camp Wheeler (Ga.) Spokes
1944—Sherman Field (Kans.) Flyers
1945—Enid (Okla.) Army Air Field
1946—St. Joseph (Mich.) Autos
1947—Ft. Wayne (Ind.) General Electrics
1948—Ft. Wayne (Ind.) General Electrics
1949—Ft. Wayne (Ind.) General Electrics
1950—Ft. Wayne (Ind.) Capeharts
1951—Sinton (Texas) Plymouth Oilers
1952—Fort Myer (Va.) Colonials
1953—Fort Leonard Wood (Mo.)

## Feller's Pitching Masterpieces

NO-HIT GAMES					
Date	Opponent	Score	SO	BB	
April 16, 1940	Chicago	1-0	8	5	
April 30, 1946	New York	1-0	11	5	
July 1, 1951	Detroit	2-1	5	3	
ONE-HIT GAMES					
April 20, 1938	St. Louis	9-0	6	6	
May 25, 1939	Boston	11-0	10	5	
June 27, 1939	Detroit	5-0	13	6	
July 12, 1940	Philadelphia	1-0	13	2	
Sept. 26, 1941	St. Louis	3-2	6	7	
Sept. 19, 1945	Detroit	2-0	7	4	
July 31, 1946	Boston	4-1	9	9	
Aug. 8, 1946	Chicago	5-0	5	3	
April 22, 1947	St. Louis	5-0	10	1	
May 2, 1947	Boston	2-0	10	2	
April 23, 1952	St. Louis	0-1	5	6	

## BASEBALL'S HALL OF FAME

Cooperstown, N. Y.

## Lifetime Records of Immortals

[illegible]

## PITCHERS

Year elected	Name and playing years	Won	Lost
1938	Alexander, Grover C., 1911-30 . . .	373	208
1953	Bender, Charles A., 1907-17 . . .	212	128
1949	Brown, Mordecai, 1903-16 . . . . .	239	131
1946	Chesbro, John D., 1899-1909 . . .	199	128
1953	Dean, Jerome H., 1930-41 . . . . .	150	83
1946	Griffith, Clark C., 1891-1908 . . .	237	140
1947	Grove, Robert M., 1925-41 . . . . .	300	141
1947	Hubbell, Carl O., 1928-43 . . . . .	253	154
1936	Johnson, Walter P., 1907-27 . . . .	414	276
1946	McGinnity, Joseph J., 1899-1908 . .	248	141
1936	Mathewson, Christopher, 1900-16 . .	373	188
1949	Nichols, Charles A., 1890-1906 . . .	360	202
1948	Pennock, Herbert J., 1912-34 . . . .	239	161
1946	Plank, Edward S., 1901-17 . . . . .	324	190
1939	Radbourne, Charles G., 1880-91 . . .	308	191
1946	Waddell, George E., 1897-1910 . . .	203	143
1946	Walsh, Edward A., 1904-17 . . . . .	195	126
1937	Young, Denton T., 1890-1911 . . . .	511	315

SELECTED FOR MERITORIOUS SERVICE

Morgan G. Bulkeley, first National League president. B. Bancroft Johnson, first American League president. Henry Chadwick, pioneer writer, statistician. Alexander J. Cartwright, organizer of first baseball club. Albert G. Spalding, early player, founder of sporting goods firm. William A. Cummings, early pitcher credited with originating curve ball. Judge Kenesaw M. Landis, baseball's first commissioner. William Klem, with National League umpiring staff for 46 years. Thomas Connolly, with American League umpiring staff for 52 years. Harry Wright, manager in National League for three decades. Edward G. Barrow, American League manager and executive.

### BABE RUTH'S MAJOR LEAGUE HOME-RUN RECORD

(A) American League; (N) National League

Regular Season			World Series			All-Star Game					
Year	Club	Home runs	Year	Club	Home runs	Year	Club	Home runs			
1914	Boston (A).....	0	1926	New York (A).....	47	1915	Boston (A).....	0	1933	American.....	1
1915	Boston (A).....	4	1927	New York (A).....	60	1916	Boston (A).....	0	1934	American.....	0
1916	Boston (A).....	3	1928	New York (A).....	54	1918	Boston (A).....	0			—
1917	Boston (A).....	2	1929	New York (A).....	46	1921	New York (A)....	1		Total.....	1
1918	Boston (A).....	11	1930	New York (A).....	49	1922	New York (A).....	0			
1919	Boston (A).....	29	1931	New York (A).....	46	1923	New York (A).....	3	Grand total.....	730	
1920	New York (A)....	54	1932	New York (A).....	41	1926	New York (A)....	4			
1921	New York (A)....	59	1933	New York (A)....	34	1927	New York (A)....	2			
1922	New York (A)....	35	1934	New York (A)....	22	1928	New York (A)....	3			
1923	New York (A)....	41	1935	Boston (N).....	6	1932	New York (A)....	2			
1924	New York (A)....	46			—			—			
1925	New York (A)....	25		Total.....	714		Total.....	15			



## Major League Individual All-Time Records

<b>Highest batting average, season</b> —Hugh Duffy, Boston (N), 1894 . . . . .	438	<b>Most 3-base hits, season</b> —J. Owen Wilson, Pittsburgh (N), 1912 . . . . .	36
<b>Highest batting average (10 or more years)</b> —Ty Cobb, Detroit and Philadelphia (A), 1905–28 . . . . .	367	<b>Most 2-base hits</b> —Tris E. Speaker, Boston, Cleveland, Washington, Philadelphia (A), 1907–28 . . . . .	793
<b>Most years batting over .300</b> —Ty Cobb . . . . .	23	<b>Most 2-base hits, season</b> —Earl W. Webb, Boston (A), 1931 . . . . .	67
<b>Most hits</b> —Ty Cobb . . . . .	4,191	<b>Most singles</b> —Ty Cobb . . . . .	3,052
<b>Most hits, season</b> —George Sisler, St. Louis (A), 1920 . . . . .	257	<b>Most singles, season (modern record)</b> —Lloyd Waner, Pittsburgh (N), 1927 . . . . .	198
<b>Most consecutive hits, game</b> —Wilbert Robinson, Baltimore (N), 1892 . . . . .	7	<b>Most runs</b> —Ty Cobb . . . . .	2,244
<b>Most successive hits</b> —Frank Higgins, Boston (A), 1938; Walt Dropo, Detroit, 1952 . . . . .	12	<b>Most runs batted in</b> —Babe Ruth . . . . .	2,209
<b>Most consecutive games batted safely</b> —Joe DiMaggio, New York (A), May 15 to July 16, 1941, inclusive . . . . .	56	<b>Most runs batted in, season</b> —Hack Wilson, Chicago (N), 1930 . . . . .	190
<b>Most long hits</b> —Babe Ruth, Boston and New York (A), Boston (N), 1914–35 (506 2b, 136 3b, 714 home runs) . . . . .	1,356	<b>Most runs batted in, single game</b> —James L. Bottomley, St. Louis (N) vs. Brooklyn, Sept. 16, 1924 . . . . .	12
<b>Most total bases</b> —Ty Cobb . . . . .	5,863	<b>Most games played</b> —Ty Cobb . . . . .	3,033
<b>Most total bases, season</b> —Babe Ruth, New York (A), 1921 . . . . .	457	<b>Most consecutive games played</b> —Lou Gehrig, New York (A). Streak started June 1, 1925, and stopped May 2, 1939 . . . . .	2,130
<b>Most total bases, game</b> —Joe Adcock, Milwaukee vs. Brooklyn, July 31, 1954 . . . . .	18	<b>Longest service as player</b> —Eddie Collins, Philadelphia and Chicago (A), 1906–30; Bobby Wallace, Cleveland (N), St. Louis (A), St. Louis (N), 1894–1918 . . . . .	25 years
<b>Most home runs</b> —Babe Ruth . . . . .	714	<b>Most times at bat</b> —Ty Cobb . . . . .	11,429
<b>Most home runs, season</b> —Babe Ruth, New York (A), 1927 . . . . .	60	<b>Most bases on balls</b> —Babe Ruth . . . . .	2,056
<b>Most home runs, 1 game</b> —Lowe, Boston (N), 1894; Delahanty, Phila. (N), 1896; Gehrig, N. Y. (A), 1932; Klein, Phila. (N), 1936 (10 innings); Seerey, Chicago (A), 1948 (11 innings); Hodges, Brooklyn, 1950; Adcock, Milwaukee, 1954 . . . . .	4	<b>Most bases on balls, season</b> —Babe Ruth, 1923 . . . . .	170
<b>Most 3-base hits</b> —Sam Crawford, Cincinnati (N), 1899–1902; Detroit (A), 1903–17 . . . . .	312	<b>Most bases on balls, game (modern record)</b> —Jimmy Foxx Boston (A), 1938 . . . . .	6

<b>Most stolen bases</b> —Ty Cobb . . . . .	892
<b>Most stolen bases, season (modern record)</b> —Ty Cobb, Detroit (A), 1915 . . . . .	96
<b>Fewest strikeouts, season (150 or more games)</b> —Joe Sewell, Cleveland (A), 1925, 1929 . . . . .	4
<b>Most consecutive years manager, one club</b> —Connie Mack, Phila. (A), 1901–50 . . . . .	50

## PITCHING

<b>Most games</b> —Cy Young (516 in National League, 390 in American League), 1890–1911 . . . . .	906	<b>Most games won, season (modern record)</b> —Jack Chesbro, New York (A), 1904 . . . . .	41
<b>Most games won</b> —Cy Young, Cleveland (N), 1890–98; St. Louis (N), 1899–1900; Boston (A), 1901–08; Cleveland (A), 1909–11 (part); Boston (N), 1911 (part) . . . . .	511	<b>Most consecutive games won, season</b> —Tim Keefe, New York (N), 1888; Rube Marquard, New York (N), 1912 . . . . .	19
<b>Most complete games, season</b> —Jack Chesbro, New York (A), 1904 . . . . .	48	<b>Most shutout games</b> —Walter Johnson, Washington (A), 1907–27 . . . . .	113
<b>Most games, season (modern record)</b> —Jim Konstanty, Philadelphia (N), 1950 . . . . .	74	<b>Most shutout games, season</b> —Grover Alexander, Philadelphia (N), 1916 . . . . .	16
<b>Most innings, season</b> —Ed Walsh, Chicago (A), 1908 . . . . .	464	<b>Most consecutive shutout innings</b> —Walter Johnson, 1913 . . . . .	56
<b>Lowest earned-run average, season</b> —Ferdie Schupp, New York (N), 1916 . . . . .	0.90	<b>Most strikeouts</b> —Walter Johnson . . . . .	3,497
<b>Fewest hits in two consecutive games</b> —John Vander Meer, Cincinnati (N), 1938 (both no-hit games) . . . . .	0	<b>Most strikeouts, season (modern record)</b> —Bobby Feller, Cleveland (A), 1946 . . . . .	348
		<b>Most strikeouts in 9 innings (1901 to date)</b> —Bobby Feller, Cleveland (A) vs. Detroit, Oct. 2, 1938 . . . . .	18

## MAJOR LEAGUE STATISTICS

Source: American League and National League Service Bureaus.

If—Left-field foul line; cf—center field; rf—right-field foul line. (2)—Indicates double-header scheduled.

## American League

Club, nickname and grounds	Distance, feet			Seating capacity	Record attendance	Visiting club	Date
	If	cf	rf				
Baltimore Orioles—Municipal Stadium	309	440	309	48,000	46,796	New York (2)	May 16, 1954
Boston Red Sox—Fenway Park	315	420	302	34,817	41,766	New York (2)	Aug. 12, 1934
Chicago White Sox—Comiskey Park	352	415	352	47,400	53,940	New York (night)	June 8, 1951
Cleveland Indians—Municipal Stadium	321	410	321	73,500	84,587	New York (2)	Sept. 12, 1954
Detroit Tigers—Briggs Stadium	340	440	325	52,954	58,369	New York (2)	July 20, 1947
New York Yankees—Yankee Stadium	301	461	296	67,000	81,841	Boston (2)	May 30, 1938
Philadelphia Athletics—Shibe Park	334	468	331	33,223	38,800	Washington (2)	July 13, 1931
Washington Senators—Griffith Stadium	388	426	328	30,000	35,563	New York (2)	July 4, 1936

## National League

Brooklyn Dodgers—Ebbets Field	343	405	297	32,111	41,209	New York (2)	May 30, 1934
Chicago Cubs—Wrigley Field	355	400	353	38,710	46,965	Pittsburgh (2)	May 31, 1948
Cincinnati Reds—Crosley Field	328	387	342	30,000	36,961	Pittsburgh (2)	Apr. 27, 1947
Milwaukee Braves—County Stadium	320	402	315	42,797	46,944	New York (night)	Aug. 27, 1954
New York Giants—Polo Grounds	279	480	257	55,000	60,747	Brooklyn (2)	May 31, 1937
Philadelphia Phillies—Shibe Park	334	468	331	33,223	40,720	Brooklyn (2)	May 11, 1947
Pittsburgh Pirates—Forbes Field	335	457	300	33,730	43,586	New York (2)	Aug. 31, 1938
St. Louis Cardinals—Busch Stadium	351	426	310	30,808	45,770	Chicago (2)	July 12, 1931

## RECORD OF MAJOR LEAGUE ALL-STAR GAMES

Date	Winning league and pitcher	Runs	Losing league and pitcher	Runs	Where held	Paid attendance	Receipts
July 6, 1933	American (Gomez)	4	National (Hallahan)	2	Chicago (A)	49,200	\$ 51,203.50*
July 10, 1934	American (Harder)	9	National (Mungo)	7	New York (N)	48,363	52,982.00
July 8, 1935	American (Gomez)	4	National (Walker)	1	Cleveland (A)	69,812	82,179.12
July 7, 1936	National (J. Dean)	4	American (Grove)	3	Boston (N)	25,556	24,588.80
July 7, 1937	American (Gomez)	8	National (J. Dean)	3	Washington (A)	31,391	28,475.18
July 6, 1938	National (Vander Meer)	4	American (Gomez)	1	Cincinnati (N)	27,067	38,469.05
July 11, 1939	American (Bridges)	3	National (Lee)	1	New York (A)	62,892	75,701.00
July 9, 1940	National (Derringer)	4	American (Ruffing)	0	St. Louis (N)	32,373	36,723.03
July 8, 1941	American (Smith)	7	National (Passeau)	5	Detroit (A)	54,674	63,267.08
July 6, 1942	American (Chandler)	3	National (M. Cooper)	1	New York (N)	33,694	86,102.98
July 13, 1943	American (Leonard)	5	National (M. Cooper)	3	Philadelphia (A)	31,938	65,674.00†
July 11, 1944	National (Raffensberger)	7	American (Hughson)	1	Pittsburgh (N)	29,589	81,275.00†
July 9, 1946	American (Feller)	12	National (Passeau)	0	Boston (A)	34,906	89,071.00
July 8, 1947	American (Shea)	2	National (Sain)	1	Chicago (N)	41,123	105,314.90
July 13, 1948	American (Raschi)	5	National (Schmitz)	2	St. Louis (A)	34,009	93,447.00
July 12, 1949	American (Trucks)	11	National (Newcombe)	7	Brooklyn (N)	32,577	79,225.07
July 11, 1950	†National (Blackwell)	4	American (Gray)	3	Chicago (A)	46,127	126,179.52
July 10, 1951	National (Maglie)	8	American (Lopat)	3	Detroit (A)	52,075	124,294.01
July 8, 1952	National (Rush)	3	American (Lemon)	2	Philadelphia (N)	32,785	108,762.00
July 14, 1953	National (Spahn)	5	American (Reynolds)	1	Cincinnati (N)	30,846	155,654.00

\* An additional \$5,175 was received for radio rights. † Additional funds were received from other sources. ‡ Fourteen innings. Note: No game in 1945.

## MOST VALUABLE PLAYERS

(Baseball Writers' Association selections)

## American League

1931—Robert Grove, Philadelphia
1932—James Fox, Philadelphia
1933—James Fox, Philadelphia
1934—Gordon Cochran, Detroit
1935—Henry Greenberg, Detroit
1936—Lou Gehrig, New York
1937—Charles Gehring, Detroit
1938—James Fox, Boston
1939—Joe DiMaggio, New York
1940—Henry Greenberg, Detroit
1941—Joe DiMaggio, New York
1942—Joe Gordon, New York
1943—Spurgeon Chandler, New York
1944—Harold Newhouser, Detroit
1945—Harold Newhouser, Detroit
1946—Ted Williams, Boston
1947—Joe DiMaggio, New York
1948—Lou Boudreau, Cleveland
1949—Ted Williams, Boston
1950—Phil Rizzuto, New York
1951—Lawrence Berra, New York
1952—Robert Shantz, Philadelphia
1953—Al Rosen, Cleveland

## National League

1931—Frank Frisch, St. Louis
1932—Charles Klein, Philadelphia
1933—Carl Hubbell, New York
1934—Jerome Dean, St. Louis
1935—Charles Hartnett, Chicago
1936—Carl Hubbell, New York
1937—Joseph Medwick, St. Louis
1938—Ernest Lombardi, Cincinnati
1939—William Walters, Cincinnati
1940—Frank McCormick, Cincinnati
1941—Adolph Camilli, Brooklyn
1942—Morton Cooper, St. Louis
1943—Stanley Musial, St. Louis
1944—Marty Marion, St. Louis
1945—Phil Cavarretta, Chicago
1946—Stanley Musial, St. Louis
1947—Robert Elliott, Boston
1948—Stanley Musial, St. Louis
1949—Jackie Robinson, Brooklyn
1950—Jim Konstanty, Philadelphia
1951—Roy Campanella, Brooklyn
1952—Henry Sauer, Chicago
1953—Roy Campanella, Brooklyn

## JUNIOR WORLD SERIES RECORD

International League (I) vs. American Association (AA)

No series in 1905, 1908 to 1916, inclusive; 1918, 1919 and 1935.

Year	Winner	Manager	Games won	Loser	Manager	Games won
1904	Buffalo (I)	George Stallings	2	St. Paul	Mike Kelley	1
1906*	Buffalo (I)	George Stallings	3	Columbus	Bill Clymer	2
1907	Toronto (I)	Joe Kelley	4	Columbus	Bill Clymer	1
1917	Indianapolis (AA)	Jack Hendricks	4	Toronto	Nap Lajoie	1
1920	Baltimore (I)	Jack Dunn	5	St. Paul	Mike Kelley	1
1921	Louisville (AA)	Joe McCarthy	5	Baltimore	Jack Dunn	3
1922	Baltimore (I)	Jack Dunn	5	St. Paul	Mike Kelly	2
1923	Kansas City (AA)	Wilbur Good	5	Baltimore	Jack Dunn	4
1924*	St. Paul (AA)	Nick Allen	5	Baltimore	Jack Dunn	4
1925	Baltimore (I)	Jack Dunn	5	Louisville	Joe McCarthy	3
1926	Toronto (I)	Dan Howley	5	Louisville	Bill Meyer	0
1927	Toledo (AA)	Casey Stengel	5	Buffalo	Bill Clymer	1
1928*	Indianapolis (AA)	Bruno Betzel	5	Rochester	Billy Southworth	1
1929	Kansas City (AA)	Dutch Zwilling	5	Rochester	Billy Southworth	4
1930	Rochester (I)	Billy Southworth	5	Louisville	Al Sothoron	3
1931	Rochester (I)	Billy Southworth	5	St. Paul	Al Leifeld	3
1932	Newark (I)	Al Mamaux	4	Minneapolis	Donie Bush	2
1933	Columbus (AA)	Ray Blades	5	Buffalo	Ray Schalk	3
1934	Columbus (AA)	Ray Blades	5	Toronto	Ike Boone	4
1936	Milwaukee (AA)	Al Sothoron	4	Buffalo	Ray Schalk	1
1937	Newark (I)	Oscar Vitt	4	Columbus	Burt Shotton	3
1938	Kansas City (AA)	Bill Meyer	4	Newark	Johnny Neun	3
1939	Louisville (AA)	Bill Burwell	4	Rochester	Billy Southworth	3
1940	Newark (I)	Johnny Neun	4	Louisville	Bill Burwell	2
1941	Columbus (AA)	Burt Shotton	4	Montreal	Clyde Sukeforth	2
1942	Columbus (AA)	Eddie Dyer	4	Syracuse	Jewel Ens	1
1943	Columbus (AA)	Nick Cullop	4	Syracuse	Jewel Ens	1
1944	Baltimore (I)	Tommy Thomas	4	Louisville	Harry Leibold	2
1945	Louisville (AA)	Harry Leibold	4	Newark	Bill Meyer	2
1946	Montreal (I)	Clay Hopper	4	Louisville	Harry Leibold	2
1947	Milwaukee (AA)	Nick Cullop	4	Syracuse	Jewel Ens	3
1948	Montreal (I)	Clay Hopper	4	St. Paul	Walter E. Alston	1
1949	Indianapolis (AA)	Al Lopez	4	Montreal	Clay Hopper	2
1950	Columbus (AA)	Rollie Hemsley	4	Baltimore	Nick Cullop	1
1951	Milwaukee (AA)	Charlie Grimm	4	Montreal	Walter Alston	2
1952	Rochester (I)	Harry Walker	4	Kansas City	George Selkirk	3
1953	Montreal (I)	Walter Alston	4	Kansas City	Harry Craft	1

\* Played tie game.

## Longest Game in the Majors

The 26-inning 1-1 tie game between Brooklyn and Boston of the National League, played at Braves Field, Boston, on May 1, 1920, still stands as the longest contest in major league history. Both pitchers, Joe Oeschger of the Braves and

Leon Cadore of the Robins, as they were then called because they were managed by Wilbert Robinson, went the distance. George (Miracle Man) Stallings guided Boston. The game was called because of darkness.

## OFFICIAL BOX SCORE

BROOKLYN (N)							BOSTON (N)						
ab	r	h	po	a	e		ab	r	h	po	a	e	
Olson, 2b.....	10	0	1	5	8	1	Powell, cf.....	7	0	1	8	0	0
Neils, rf.....	10	0	1	9	0	0	Pick, 2b.....	11	0	0	6	11	2
Johnston, 3b.....	10	0	2	3	1	0	Mann, lf.....	10	0	2	6	0	0
Wheat, lf.....	9	0	2	3	0	0	Cruise, rf.....	9	1	1	4	0	0
Myers, cf.....	2	0	1	2	0	0	Holke, 1b.....	10	0	2	42	1	0
Hood, cf.....	6	0	1	9	1	0	Boeckel, 3b.....	11	0	3	1	7	0
Konetchy, 1b.....	9	0	1	30	0	0	Maranville, ss.....	10	0	3	1	9	0
Ward, ss.....	10	0	0	5	3	1	O'Neil, c.....	2	0	0	4	1	0
Krueger, c.....	2	1	0	4	3	0	a Christenbury.....	1	0	1	0	0	0
Elliott, c.....	7	0	0	7	3	0	Gowdy, c.....	6	0	1	6	1	0
Cadore, p.....	10	0	0	1	12	0	Oeschger, p.....	9	0	1	0	11	0
Total.....	85	1	9	78	31	2	Total.....	86	1	15	78	41	2

Total..... 85 1 9 78 31 2

Total..... 86 1 15 78 41 2

a Batted for O'Neil in the ninth.

(Called, darkness)

Runs batted in—Olson, Boeckel.

Two-base hits—Maranville, Oeschger. Three-base hits—Cruise. Stolen bases—Myers, Hood. Sacrifices—Hood, Powell, Cruise, Holke, O'Neil, Oeschger. Double plays—Olson and Konetchy; Oeschger, Holke and Gowdy. Left on bases—Boston 16, Brooklyn 11. Earned runs—Boston 1, Brooklyn 1. Struck out—by Cadore 7 (Pick, Mann, Cruise, Gowdy, Oeschger 3), Oeschger 7 (Olson, Neils 2, Johnston, Hood, Elliott, Cadore). Bases on balls—Off Cadore 5 (Powell 3, Mann, Cruise), Oeschger 4 (Wheat, Hood, Konetchy, Krueger). Wild pitch—Oeschger. Umpires—McCormick and Hart. Time—3:50. Attendance—2,000.



## GOLF

IT MAY BE that golf originated in Holland—historians believe it did—but certainly Scotland fostered the game and is famous for it. In fact, in 1457 the Scottish Parliament, disturbed because football and golf had lured young Scots from the more soldierly exercise of archery, passed an ordinance that "futeball and golf be utterly cryit doun and nocht usit". James I and Charles I of the royal line of Stuarts were golf enthusiasts, whereby the game came to be known as "the royal and ancient game of golf".

The golf balls used in the early games were leather covered and stuffed with feathers. Clubs of all kinds were fashioned by hand to suit individual players. The great step in spreading the game came with the change from the feather ball to the gutta-percha ball about 1850, and in 1860 formal competition began with the establishment of an annual tournament for the British open championship. There are records of "golf clubs" in the United

States as far back as colonial days but no proof of actual play before John Reid and some friends laid out six holes on the Reid lawn in Yonkers, N. Y., in 1888 and played there with the golf balls and clubs brought over from Scotland by Robert Lockhart. This group then formed the St. Andrews Golf Club of Yonkers, and golf was established in this country.

However, it remained a rather sedate and almost aristocratic pastime until a 20-year-old ex-caddy, Francis Ouimet of Boston, defeated two great British professionals, Harry Vardon and Ted Ray, in the United States Open championship at Brookline, Mass., in 1913. This feat put the game and Francis Ouimet on the front pages of the newspapers and stirred a wave of enthusiasm for the sport. The greatest feat so far in golf history was that of Robert Tyre Jones, Jr. of Atlanta, Ga., in winning the British Open, the British Amateur, the U. S. Open and the U. S. Amateur titles in one year, 1930.

## Golf Statistics

Source: United States Golf Association.

## UNITED STATES OPEN CHAMPIONS

Year	Winner	Score	Where played	Year	Winner	Score	Where played
1895	Horace Rawlins.....	173	Newport	1924	Cyril Walker.....	297	Oakland Hills
1896	James Foulis.....	152	Shinnecock Hills	1925	W. Macfarlane (a).....	291	Worcester
1897	Joe Lloyd.....	162	Chicago	1926	R. T. Jones, Jr.(a,b).....	293	Scioto
1898*	Fred Herd.....	328	Myopia	1927	Tommy Armour (a).....	301	Oakmont
1899	Willie Smith.....	315	Baltimore	1928	Johnny Farrell (a).....	294	Olympia Fields
1900	Harry Vardon.....	313	Chicago	1929	R. T. Jones, Jr.(a,b).....	294	Winged Foot
1901	Willie Anderson (a).....	331	Myopia	1930	R. T. Jones, Jr.(b).....	287	Interlachen
1902	L. Auchterlonie.....	307	Garden City	1931	Billy Burke (a).....	292	Inverness
1903	Willie Anderson (a).....	307	Baltusrol	1932	Gene Sarazen.....	286	Fresh Meadow
1904	Willie Anderson.....	303	Glen View	1933	John Goodman (b).....	287	North Shore
1905	Willie Anderson.....	314	Myopia	1934	Olin Dutra.....	293	Merion
1906	Alex Smith.....	295	Onwentsia	1935	Sam Parks, Jr.....	299	Oakmont
1907	Alex Ross.....	302	Philadelphia	1936	Tony Manero.....	282	Baltusrol
1908	Fred McLeod (a).....	322	Myopia	1937	Ralph Guldahl.....	281	Oakland Hills
1909	George Sargent.....	290	Englewood	1938	Ralph Guldahl.....	284	Cherry Hills
1910	Alex Smith (a).....	298	Philadelphia	1939	Byron Nelson (a).....	284	Philadelphia
1911	J. J. McDermott (a).....	307	Chicago	1940	W. Lawson Little, Jr.(a).....	287	Canterbury
1912	J. J. McDermott.....	294	Buffalo	1941	Craig Wood.....	284	Colonial
1913	Francis Ouimet (a,b).....	304	Brookline	1942-45	No tournaments†		
1914	Walter Hagen.....	290	Midlothian	1946	Lloyd Mangrum (a).....	284	Canterbury
1915	Jerome D. Travers (b).....	297	Baltusrol	1947	Lew Worsham (a).....	282	St. Louis
1916	Charles Evans, Jr.(b)....	286	Minikahda	1948	Ben Hogan.....	276	Riviera
1917-18	No tournaments†			1949	Cary Middlecoff.....	286	Medinah
1919	Walter Hagen (a).....	301	Brae Burn	1950	Ben Hogan (a).....	287	Merion
1920	Edward Ray.....	295	Inverness	1951	Ben Hogan.....	287	Oakland Hills
1921	James M. Barnes.....	289	Columbia	1952	Julius Boros.....	281	Northwood
1922	Gene Sarazen.....	288	Skokie	1953	Ben Hogan.....	283	Oakmont
1923	R. T. Jones, Jr.(a,b).....	296	Inwood				

(a) Won play-off. (b) Amateur. \* In 1898 competition was extended to 72 holes. † In 1917, Jock Hutchison, with a 292, won an Open Patriotic Tournament for the benefit of the American Red Cross at Whitemarsh Valley Country Club. ‡ In 1942, Ben Hogan, with a 271, won a Hale American National Open Tournament for the benefit of the Navy Relief Society and USO at Ridgemoor Country Club.

## UNITED STATES AMATEUR CHAMPIONS

Year	Winner	Where played	Year	Winner	Where played
1895	Charles B. Macdonald.....	Newport	1924	R. T. Jones, Jr.....	Merion
1896	H. J. Whigham.....	Shinnecock Hills	1925	R. T. Jones, Jr.....	Oakmont
1897	H. J. Whigham.....	Chicago	1926	George Von Elm.....	Baltusrol
1898	Findlay S. Douglas.....	Morris County	1927	R. T. Jones, Jr.....	Minikahda
1899	H. M. Harriman.....	Onwentsia	1928	R. T. Jones, Jr.....	Brae Burn
1900	Walter J. Travis.....	Garden City	1929	H. R. Johnston.....	Del Monte
1901	Walter J. Travis.....	Atlantic City	1930	R. T. Jones, Jr.....	Merion
1902	Louis N. James.....	Glen View	1931	Francis Ouimet.....	Beverly
1903	Walter J. Travis.....	Nassau	1932	C. R. Somerville.....	Baltimore
1904	H. Chandler Egan.....	Baltusrol	1933	G. T. Dunlap, Jr.....	Kenwood
1905	H. Chandler Egan.....	Chicago	1934	W. Lawson Little, Jr.....	Brookline
1906	Eben M. Byers.....	Englewood	1935	W. Lawson Little, Jr.....	Cleveland
1907	Jerome D. Travers.....	Euclid	1936	John W. Fischer.....	Garden City
1908	Jerome D. Travers.....	Garden City	1937	John Goodman.....	Alderwood
1909	Robert A. Gardner.....	Chicago	1938	Willie Turnesa.....	Oakmont
1910	W. C. Fownes, Jr.....	Brookline	1939	Marvin H. Ward.....	North Shore
1911	Harold H. Hilton.....	Apawamis	1940	R. D. Chapman.....	Winged Foot
1912	Jerome D. Travers.....	Chicago	1941	Marvin H. Ward.....	Omaha
1913	Jerome D. Travers.....	Garden City	1946	Ted Bishop.....	Baltusrol
1914	Francis Ouimet.....	Ekwanok	1947	Robert Riegel.....	Del Monte
1915	Robert A. Gardner.....	Detroit	1948	Willie Turnesa.....	Memphis
1916	Charles Evans, Jr.....	Merion	1949	Charles Coe.....	Oak Hill
1919	S. D. Herron.....	Oakmont	1950	Sam Urzetta.....	Minneapolis
1920	Charles Evans, Jr.....	Engineers'	1951	Billy Maxwell.....	Saucon Valley
1921	Jesse P. Guilford.....	St. Louis	1952	Jack Westland.....	Seattle
1922	Jess W. Sweetser.....	Brookline	1953	Gene Littler.....	Okl. City
1923	Max R. Marston.....	Flossmoor			

## UNITED STATES WOMEN AMATEUR CHAMPIONS

1895	Mrs. C. S. Brown.....	Meadow Brook	1924	Mrs. D. C. Hurd.....	Rhode Island
1896	Beatrix Hoyt.....	Morris County	1925	Glenna Collett.....	St. Louis
1897	Beatrix Hoyt.....	Essex (Mass.)	1926	Mrs. G. H. Stetson.....	Merion
1898	Beatrix Hoyt.....	Ardley	1927	Mrs. M. B. Horn.....	Cherry Valley
1899	Ruth Underhill.....	Philadelphia	1928	Glenna Collett.....	Hot Springs (Va.)
1900	Frances C. Griscom.....	Shinnecock Hills	1929	Glenna Collett.....	Oakland Hills
1901	Genevieve Hecker.....	Baltusrol	1930	Glenna Collett.....	Los Angeles
1902	Genevieve Hecker.....	Brookline	1931	Helen Hicks.....	Buffalo
1903	Bessie Anthony.....	Chicago	1932	Virginia Van Wie.....	Salem
1904	G. M. Bishop.....	Merion	1933	Virginia Van Wie.....	Exmoor
1905	Pauline Mackay.....	Morris County	1934	Virginia Van Wie.....	Whitemarsh Valley
1906	Harriot S. Curtis.....	Brae Burn	1935	Mrs. E. H. Vare, Jr.....	Interlachen
1907	Margaret Curtis.....	Midlothian	1936	Pamela Barton.....	Canoe Brook
1908	K. C. Harley.....	Chevy Chase	1937	Mrs. J. A. Page, Jr.....	Memphis
1909	D. I. Campbell.....	Merion	1938	Patty Berg.....	Westmoreland
1910	D. I. Campbell.....	Homewood	1939	Betty Jameson.....	Wee Burn
1911	Margaret Curtis.....	Baltusrol	1940	Betty Jameson.....	Del Monte
1912	Margaret Curtis.....	Essex (Mass.)	1941	Mrs. Frank Newell.....	Brookline
1913	Gladys Ravenscroft.....	Wilmington	1946	Mrs. M. D. Zaharias.....	Tulsa
1914	Mrs. H. A. Jackson.....	Nassau	1947	Louise Suggs.....	Franklin Hills
1915	Mrs. C. H. Vanderbeck.....	Onwentsia	1948	Grace Lenczyk.....	Pebble Beach
1916	Alexa Stirling.....	Belmont Springs	1949	Mrs. D. G. Porter.....	Merion
1919	Alexa Stirling.....	Shawnee	1950	Beverly Hanson.....	East Lake
1920	Alexa Stirling.....	Mayfield	1951	Dorothy Kirby.....	Town and Country
1921	Marion Hollins.....	Hollywood (N. J.)	1952	Mrs. Jacqueline Pung.....	Waverley
1922	Glenna Collett.....	Greenbrier	1953	Mary Lena Faulk.....	Rhode Island
1923	Edith Cummings.....	Westchester-Biltmore			

## U. S. PUBLIC LINKS CHAMPIONS

1922—Edmund R. Held	1937—Bruce N. McCormick
1923—Richard J. Walsh	1938—Al Leach
1924—Joseph Coble	1939—Andrew Szwedko
1925—R. J. McAuliffe	1940—Robert C. Clark
1926—Lester Bolstad	1941—William M. Welch
1927—29—C. F. Kauffmann	1942-45—No competition
1930—Robert E. Wingate	1946—Smiley Quick
1931—Charles Ferrara	1947—Wilfred Crossley
1932—R. L. Miller	1948—Michael R. Ferentz
1933—Charles Ferrara	1949—Ken Towns
1934—David A. Mitchell	1950—Stan Bielat
1935—Frank Strafacci	1951—Dave Stanley
1936—B. Patrick Abbott	1952—Omer L. Bogan
	1953—Ted Richards

## UNITED STATES P. G. A. CHAMPIONS

Year	Winner	Where played	Year	Winner	Where played
1916	Jim Barnes	Siwanoy, N. Y.	1935	Johnny Revolta	Twin Hills, Okla.
1917-18	No tournaments		1936	Denny Shute	Pinehurst, N. C.
1919	Jim Barnes	Engineers, L. I.	1937	Denny Shute	Pittsburgh, Pa.
1920	Jock Hutchison	Flossmoor, Ill.	1938	Paul Runyan	Shawnee-on-Delaware, Pa.
1921	Walter Hagen	Inwood, L. I.	1939	Henry Picard	Pomonok, L. I.
1922	Gene Sarazen	Oakmont, Pa.	1940	Byron Nelson	Hershey, Pa.
1923	Gene Sarazen	Pelham, N. Y.	1941	Victor Ghezzi	Denver, Colo.
1924	Walter Hagen	French Lick, Ind.	1942	Sam Snead	Atlantic City, N. J.
1925	Walter Hagen	Olympia Fields, Ill.	1943	No tournament	
1926	Walter Hagen	Salisbury, L. I.	1944	Bob Hamilton	Spokane, Wash.
1927	Walter Hagen	Dallas, Texas	1945	Byron Nelson	Dayton, Ohio
1928	Leo Diegel	Baltimore, Md.	1946	Ben Hogan	Portland, Oreg.
1929	Leo Diegel	Hillcrest, Calif.	1947	Jim Ferrier	Plum Hollow, Mich.
1930	Tommy Armour	Fresh Meadow, L. I.	1948	Ben Hogan	St. Louis, Mo.
1931	Tom Creavy	Wannamoisset, R. I.	1949	Sam Snead	Richmond, Va.
1932	Olin Dutra	Keller Course, Minn.	1950	Chandler Harper	Columbus, Ohio
1933	Gene Sarazen	Blue Mound, Wis.	1951	Sam Snead	Oakmont, Pa.
1934	Paul Runyan	Park Club, Buffalo	1952	Jim Turnesa	Louisville, Ky.
			1953	Walter Burkemo	Birmingham, Mich.

## BRITISH OPEN CHAMPIONS

Year	Winner	Score	Where played	Year	Winner	Score	Where played
1860	W. Park	174	Prestwick	1903	H. Vardon	300	Prestwick
1861	Tom Morris, Sr.	163	Prestwick	1904	Jack White	296	Sandwich
1862	Tom Morris, Sr.	163	Prestwick	1905	James Braid	318	St. Andrews
1863	W. Park	168	Prestwick	1906	James Braid	300	Muirfield
1864	Tom Morris, Sr.	167	Prestwick	1907	Arnaud Massy	312	Hoylake
1865	A. L. Strath	162	Prestwick	1908	James Braid	291	Prestwick
1866	W. Park	169	Prestwick	1909	J. H. Taylor	295	Deal
1867	Tom Morris, Sr.	170	Prestwick	1910	James Braid	299	St. Andrews
1868	Tom Morris, Jr.	170	Prestwick	1911	Harry Vardon (a)	303	Sandwich
1869	Tom Morris, Jr.	154	Prestwick	1912	E. Ray	295	Muirfield
1870	Tom Morris, Jr.	149	Prestwick	1913	J. H. Taylor	304	Hoylake
1872	Tom Morris, Jr.	166	Prestwick	1914	Harry Vardon	306	Prestwick
1873	Tom Kidd	179	St. Andrews	1915-19	No tournaments		
1874	Mungo Park	159	Musselburgh	1920	George Duncan	303	Deal
1875	Willie Park	166	Prestwick	1921	Jock Hutchison (a)	296	St. Andrews
1876	Bob Martin	176	St. Andrews	1922	Walter Hagen	300	Sandwich
1877	Jamie Anderson	160	Musselburgh	1923	A. G. Havers	295	Troon
1878	Jamie Anderson	157	Prestwick	1924	Walter Hagen	301	Hoylake
1879	Jamie Anderson	170	St. Andrews	1925	Jim Barnes	300	Prestwick
1880	Bob Ferguson	162	Musselburgh	1926	R. T. Jones, Jr.	291	Royal Lytham, St. Annes
1881	Bob Ferguson	170	Prestwick	1927	R. T. Jones, Jr.	285	St. Andrews
1882	Bob Ferguson	171	St. Andrews	1928	Walter Hagen	292	Sandwich
1883	W. L. Fernie (a)	159	Musselburgh	1929	Walter Hagen	292	Muirfield
1884	Jack Simpson	160	Prestwick	1930	R. T. Jones, Jr.	291	Hoylake
1885	Bob Martin	171	St. Andrews	1931	T. D. Armour	296	Carnoustie
1886	D. L. Brown	157	Musselburgh	1932	G. Sarazen	283	Princes, Sandwich
1887	W. Park, Jr.	161	Prestwick	1933	D. Shute (a)	292	St. Andrews
1888	Jack Burns	171	St. Andrews	1934	T. H. Cotton	283	Sandwich
1889	W. Park, Jr. (a)	155	Musselburgh	1935	A. Perry	283	Muirfield
1890	John Ball	164	Prestwick	1936	A. H. Padgham	287	Royal Liverpool
1891	Hugh Kirkaldy	166	St. Andrews	1937	T. H. Cotton	290	Carnoustie
1892*	H. H. Hilton	305	Muirfield	1938	R. A. Whitcombe	295	Sandwich
1893	W. Auchterlonie	322	Prestwick	1939	R. Burton	290	St. Andrews
1894	J. H. Taylor	326	Sandwich	1940-45	No tournaments		
1895	J. H. Taylor	322	St. Andrews	1946	Sam Snead	290	St. Andrews
1896	H. Vardon (a)	316	Muirfield	1947	Fred Daly	293	Hoylake
1897	H. H. Hilton	314	Hoylake	1948	Henry Cotton	284	Gullane, Muirfield
1898	H. Vardon	307	Prestwick	1949	Bobby Locke (a)	283	Sandwich, Deal
1899	H. Vardon	310	Sandwich	1950	Bobby Locke	279	Troon, Lochgreen
1900	J. H. Taylor	309	St. Andrews	1951	Max Faulkner	285	Portrush
1901	James Braid	309	Muirfield	1952	Bobby Locke	287	Royal Lytham, St. Annes
1902	Alex Herd	307	Hoylake	1953	Ben Hogan	282	Carnoustie

(a) Won play-off. \* In 1892 competition was extended to 72 holes.

## WOMEN'S NATIONAL OPEN CHAMPIONS

1946—Patty Berg (match play)	—	1950—Mrs. Mildred D. Zaharias	291
1947—Betty Jameson	295	1951—Betsy Rawls	293
1948—Mrs. Mildred D. Zaharias	300	1952—Louise Suggs	284
1949—Louise Suggs	291	1953—Betsy Rawls	302



## BRITISH AMATEUR CHAMPIONS

Year	Winner	Where played	Year	Winner	Where played
1885	A. F. MacFie	Hoylake	1915-19	No tournaments	
1886	H. G. Hutchinson	St. Andrews	1920	Cyril J. H. Tolley	Muirfield
1887	H. G. Hutchinson	Hoylake	1921	W. I. Hunter	Hoylake
1888	John Ball	Prestwick	1922	E. W. E. Holderness	Prestwick
1889	J. E. Laidlay	St. Andrews	1923	R. H. Wethered	Deal
1890	John Ball	Hoylake	1924	E. W. E. Holderness	St. Andrews
1891	J. E. Laidlay	St. Andrews	1925	Robert Harris	Westward Ho
1892	John Ball	Sandwich	1926	Jess W. Sweetser	Muirfield
1893	Peter L. Anderson	Prestwick	1927	Dr. W. Tweddell	Hoylake
1894	John Ball	Hoylake	1928	T. P. Perkins	Prestwick
1895	L. M. B. Melville	St. Andrews	1929	C. J. H. Tolley	Sandwich
1896	F. G. Tait	Sandwich	1930	R. T. Jones, Jr.	St. Andrews
1897	A. J. T. Allan	Muirfield	1931	E. Martin Smith	Westward Ho
1898	F. G. Tait	Hoylake	1932	J. De Forest	Muirfield
1899	John Ball	Prestwick	1933	Hon. M. Scott	Hoylake
1900	H. H. Hilton	Sandwich	1934	W. Lawson Little, Jr.	Prestwick
1901	H. H. Hilton	St. Andrews	1935	W. Lawson Little, Jr.	Royal Lytham, St. Annes
1902	C. Hutchings	Hoylake	1936	H. Thomson	St. Andrews
1903	R. Maxwell	Muirfield	1937	R. Sweeney, Jr.	Sandwich
1904	W. J. Travis	Sandwich	1938	C. R. Yates	Troon
1905	A. G. Barry	Prestwick	1939	A. Kyle	Hoylake
1906	James Robb	Hoylake	1940-45	No tournaments	
1907	John Ball	St. Andrews	1946	J. Bruen	Birkdale
1908	E. A. Lassen	Sandwich	1947	Willie Turnesa	Carnoustie
1909	R. Maxwell	Muirfield	1948	Frank Stranahan	Sandwich
1910	John Ball	Hoylake	1949	Max McCready	Portmarnock
1911	H. H. Hilton	Prestwick	1950	Frank Stranahan	St. Andrews
1912	John Ball	Westward Ho	1951	Richard D. Chapman	Porthcawl
1913	H. H. Hilton	St. Andrews	1952	Harvie Ward	Prestwick
1914	J. L. C. Jenkins	Sandwich	1953	Joe Carr	Hoylake

## Intercollegiate Golf Association of America Champions

Year	Individual	Team	Year	Individual	Team
1897	Louis P. Bayard, Jr., Princeton	Yale	1917-18	No tournaments	
1898*	John Reid, Jr., Yale	Harvard	1919	A. L. Walker, Jr., Columbia	Princeton
	James F. Curtis, Harvard	Yale	1920	Jess W. Sweetser, Yale	Princeton
1899	Percy Pyne, 2d, Princeton	Harvard	1921	J. Simpson Dean, Princeton	Dartmouth
1900	No tournament		1922	Pollack Boyd, Dartmouth	Princeton
1901	H. Lindsley, Harvard	Harvard	1923	Dexter Cummings, Yale	Princeton
1902*	Charles Hitchcock, Jr., Yale	Yale	1924	Dexter Cummings, Yale	Yale
	H. Chandler Egan, Harvard	Harvard	1925	G. Fred Lamprecht, Tulane	Yale
1903	F. O. Reinhart, Princeton	Harvard	1926	G. Fred Lamprecht, Tulane	Yale
1904	A. L. White, Harvard	Harvard	1927	Watts Gunn, Georgia Tech.	Princeton
1905	Robert Abbott, Yale	Yale	1928	M. J. McCarthy, Jr., Georgetown	Princeton
1906	W. E. Clow, Jr., Yale	Yale	1929	Tom Aycock, Yale	Princeton
1907	Ellis Knowles, Yale	Yale	1930	George T. Dunlap, Jr., Princeton	Princeton
1908	H. H. Wilder, Harvard	Yale	1931	George T. Dunlap, Jr., Princeton	Yale
1909	Albert Seckel, Princeton	Yale	1932	John W. Fischer, Jr., Michigan	Yale
1910	Robert E. Hunter, Yale	Yale	1933	Walter Emery, Oklahoma	Yale
1911	George C. Stanley, Yale	Yale	1934	Charles R. Yates, Georgia Tech.	Michigan
1912	F. C. Davison, Harvard	Yale	1935	Ed White, U. of Texas	Michigan
1913	Nathaniel Wheeler, Yale	Yale	1936	Charles Kocsis, Michigan	Yale
1914	Edward P. Allis, 3d, Harvard	Princeton	1937	Fred Haas, Jr., L. S. U.	Princeton
1915	Francis R. Blossom, Yale	Yale	1938	John P. Burke, Georgetown	Stanford
1916	J. W. Hubbell, Harvard	Princeton			

\* Two tournaments, in spring and fall.

## National Collegiate Athletic Association Champions

Year	Individual	Team	Year	Individual	Team
1939	Vincent D'Antoni, Tulane	Stanford	1946	George Hamer, Georgia	Stanford
1940	F. Dixon Brooke, Virginia	Princeton*	1947	Dave Barclay, Michigan	L. S. U.
		L. S. U.*	1948	Bobby Harris, San Jose St.	San Jose St.
1941	Earl Stewart, L. S. U.	Stanford	1949	Harvie Ward, North Carolina	No. Tex. St.
1942	Frank Tatum, Jr., Stanford	Stanford*	1950	Fred Wampler, Purdue	No. Tex. St.
		L. S. U.*	1951	Tom Nieporte, Ohio State	No. Tex. St.
1943	Wallace Ulrich, Carleton	Yale	1952	Jim Vickers, Oklahoma	No. Tex. St.
1944	Louis Lick, Minnesota	Notre Dame	1953	Earl Moeller, Okla. A. & M.	Stanford
1945	John Lorns, Ohio State	Ohio State			

\* Tie.

## Walker Cup Record

MEN (AMATEUR)

Year	Where played
*1921 United States 9, Great Britain 3...	Hoylake
1922 United States 8, Great Britain 4...	Southampton
1923 United States 6, Great Britain 5...	St. Andrews,
One match halved	Scotland
1924 United States 9, Great Britain 3...	Garden City G. C.
1926 United States 6, Great Britain 5...	St. Andrews,
One match halved	Scotland
1928 United States 11, Great Britain 1...	Wheaton, Ill.
1930 United States 10, Great Britain 2...	Royal St. George's
1932 United States 8, Great Britain 1...	The Country Club,
Three matches halved	Brookline, Mass.
1934 United States 9, Great Britain 2...	St. Andrews,
One match halved	Scotland
1936 United States 9, Great Britain 0...	Pine Valley G. C.,
Three matches halved	Clementon, N. J.
1938 Great Britain 7, United States 4...	St. Andrews,
One match halved	Scotland
1947 United States 8, Great Britain 4...	St. Andrews
1949 United States 10, Great Britain 2...	Winged Foot
1951 United States 6, Great Britain 3...	Southport
1953 United States 9, Great Britain 3...	Kittansett

\* Informal match.

## Curtis Cup Record

WOMEN

Year	Where played
*1930 Great Britain 8, United States 6....	Sunningdale
1932 United States 5½, Great Britain 3½...	Wentworth, Eng.
1934 United States 6½, Great Britain 2½...	Chevy Chase
1936 United States 4½, Great Britain 4½...	Gleneagles
1938 United States 5½, Great Britain 3½...	Essex C. C.
1948 United States 6½, Great Britain 2½...	Birkdale
1950 United States 7½, Great Britain 1½...	Buffalo
1952 Great Britain 5, United States 4....	Muirfield

\* Informal match.

## Wall Gets 32d Ace

Art Wall, Jr., a professional, registered his 32d hole-in-one on July 26, 1954, at the par-3, 165-yard eighth hole at the Honesdale (Pa.) Golf Club.

## U. S. Bobsledding Records

The records for the Mount Van Hoevenberg slide at Lake Placid, N. Y., the only bobsrun in America, follow:

## OLYMPIC BOBRUN (5,178 FEET)

(Times in minutes and seconds)

Two-man (single heat)—Stan Benham-James Bickford, Sno Birds of Lake Placid Club.....	1:16.64
Two-man (4 heats)—Stan Benham-James Bickford, Sno Birds of Lake Placid Club.....	5:11.61
Four-man (single heat)—Rochester B. C. (Art Tyler, driver; William Dodge; Al Soulier; Edgar Seymour, brake).....	1:10.95
Four-man (4 heats)—Sno Birds of Lake Placid Club (Stan Benham, driver; Pat Martin; James Atkinson; Howard Crossett, brake).....	4:51.90
HALF-MILE COURSE (2,305 FEET)	
Two-man (single heat)—James Bickford-Pat Buckley, Saranac Lake B. C.....	0:39.75
Two-man (4 heats)—James Bickford-Pat Buckley, Saranac Lake B. C.....	2:40.61
Four-man (single heat)—Saranac Lake B. C. (James Bickford, driver; Pat Buckley; Lucien Miron, William Dupree, brake).....	0:37.08
Four-man (4 heats)—Saranac Lake B. C. (Bickford, Buckley, Miron, Dupree).....	2:29.07

## Ryder Cup Record

MEN (PROFESSIONAL)

Year	Where played
*1926 Great Britain 13½, United States 1½	Wentworth
1927 United States 9½, Great Britain 2½...	Worcester C. C.
1929 Great Britain 7, United States 5....	Moorstown, Eng.
1931 United States 9, Great Britain 3....	Scioto C. C.
1933 Great Britain 6½, United States 5½...	Southport, Eng.
1935 United States 9, Great Britain 3....	Ridgewood C. C.
1937 United States 8, Great Britain 4....	Southport, Eng.
1947 United States 11, Great Britain 1....	Portland, Oreg.
1949 United States 7, Great Britain 5....	Ganton, Eng.
1951 United States 9½, Great Britain 2½...	Pinehurst, N. C.
1953 United States 6½, Great Britain 5½...	Wentworth

\* Informal match.

## SOFTBALL

Source: Amateur Softball Association.

## World Amateur Champions

1933—J. L. Gillis, Chicago, Ill.
1934—Ke-Nash-A's, Kenosha, Wis.
1935—Crimson Coaches, Toledo, Ohio
1936—Kodak Park, Rochester, N. Y.
1937—Briggs Mfg. Co., Detroit, Mich.
1938—Pohlers, Cincinnati, Ohio
1939—Carr's, Covington, Ky.
1940—Kodak Park, Rochester, N. Y.
1941—Bendix Brakes, South Bend, Ind.
1942—Deep Rock Oilers, Tulsa, Okla.
1943—Hammer Field, Fresno, Calif.
1944—Hammer Field, Fresno, Calif.
1945—Zollners, Fort Wayne, Ind.
1946—Zollners, Fort Wayne, Ind.
1947—Zollners, Fort Wayne, Ind.
1948—Briggs Beautyware, Detroit, Mich.
1949—Tip Top Tailors, Toronto, Ontario
1950—Clearwater (Fla.) Bombers
1951—Dow Chemical Co., Midland, Mich.
1952—Briggs Beautyware, Detroit, Mich.
1953—Briggs Beautyware, Detroit, Mich.

## WOMEN

1933—Great Northerns, Chicago, Ill.
1934—Hart Motors, Chicago, Ill.
1935—Bloomer Girls, Cleveland, Ohio
1936—National Mfg. Co., Cleveland, Ohio
1937—National Mfg. Co., Cleveland, Ohio
1938—J. J. Kreig's, Alameda, Calif.
1939—J. J. Kreig's, Alameda, Calif.
1940—Arizona Ramblers, Phoenix
1941—Higgins Midgets, Tulsa, Okla.
1942—Jax Maids, New Orleans, La.
1943—Jax Maids, New Orleans, La.
1944—Lind & Pomeroy, Portland, Ore.
1945—Jax Maids, New Orleans, La.
1946—Jax Maids, New Orleans, La.
1947—Jax Maids, New Orleans, La.
1948—Arizona Ramblers, Phoenix
1949—Arizona Ramblers, Phoenix
1950—Orange (Calif.) Lionettes
1951—Orange (Calif.) Lionettes
1952—Orange (Calif.) Lionettes
1953—Betsy Ross Rockets, Fresno, Calif.

LAWN TENNIS

LAWN TENNIS is a comparatively modern modification of the ancient game of court tennis. Major Walter Clopton Wingfield thought that something like court tennis might be played outdoors on lawns and in December, 1873, at Nantclwyd, Wales, he introduced his new game under the name of *Sphairistike* at a lawn party. The game was a success and spread rapidly, but the name was a total failure and almost immediately disappeared when all the players and spectators began to refer to the new game as "lawn tennis." In the early part of 1874 a young lady named Mary Ewing Outerbridge returned from Bermuda to New York, bringing with her the implements and necessary equipment of the new game that she had obtained from a British Army supply store in Bermuda. Miss Outerbridge and friends played the first game of lawn tennis in the United States on the grounds of the Staten Island

Cricket and Baseball Club in the spring of 1874.

For a few years the new game went along in haphazard fashion under varying rules. Tennis balls were of no standard size or texture. The nets were set at different heights up to 5 feet on the side and 4 feet in the middle. Some courts were marked out in hour-glass shape, narrow in the middle and wide at both ends. But about 1880 standard measurements for the court and standard equipment within definite limits became the rule. In 1881 the United States Lawn Tennis Association was formed and conducted the first national championship at Newport, R. I. The international matches for the Davis Cup began with a series between the British and United States players on the courts of the Longwood Cricket Club, Chestnut Hill, Mass., in 1900, with the home players winning.

Lawn Tennis Statistics

Source: The Official U.S.L.T.A. Yearbook and Tennis Guide.

DAVIS CUP CHALLENGE ROUND RESULTS

MEN

No matches in 1901, 1910, 1915-18, and 1940-45.

Year	Result	Where played	Year	Result	Where played
1900	United States 5, British Isles 0.....	Chestnut Hill	1927	France 3, United States 2.....	Philadelphia
1902	United States 3, British Isles 2.....	Brooklyn	1928	France 4, United States 1.....	Paris
1903	British Isles 4, United States 1.....	Chestnut Hill	1929	France 3, United States 2.....	Paris
1904	British Isles 5, Belgium 0.....	Wimbledon	1930	France 4, United States 1.....	Paris
1905	British Isles 5, United States 0.....	Wimbledon	1931	France 3, Great Britain 2.....	Paris
1906	British Isles 5, United States 0.....	Wimbledon	1932	France 3, United States 2.....	Paris
1907	Australasia 3, British Isles 2.....	Wimbledon	1933	Great Britain 3, France 2.....	Paris
1908	Australasia 3, United States 2.....	Melbourne	1934	Great Britain 4, United States 1.....	Wimbledon
1909	Australasia 5, United States 0.....	Sydney	1935	Great Britain 5, United States 0.....	Wimbledon
1911	Australasia 5, United States 0.....	Christchurch	1936	Great Britain 3, Australia 2.....	Wimbledon
1912	British Isles 3, Australasia 2.....	Melbourne	1937	United States 4, Great Britain 1.....	Wimbledon
1913	United States 3, British Isles 2.....	Wimbledon	1938	United States 3, Australia 2.....	Philadelphia
1914	Australasia 3, United States 1.....	Forest Hills	1939	Australia 3, United States 2.....	Haverford
1919	Australasia 4, British Isles 1.....	Sydney	1946	United States 5, Australia 0.....	Melbourne
1920	United States 5, Australasia 0.....	Auckland	1947	United States 4, Australia 1.....	Forest Hills
1921	United States 5, Japan 0.....	Forest Hills	1948	United States 5, Australia 0.....	Forest Hills
1922	United States 4, Australasia 1.....	Forest Hills	1949	United States 4, Australia 1.....	Forest Hills
1923	United States 4, Australasia 1.....	Forest Hills	1950	Australia 4, United States 1.....	Forest Hills
1924	United States 5, Australasia 0.....	Philadelphia	1951	Australia 3, United States 2.....	Sydney
1925	United States 5, France 0.....	Philadelphia	1952	Australia 4, United States 1.....	Adelaide
1926	United States 4, France 1.....	Philadelphia	1953	Australia 3, United States 2.....	Melbourne

WIGHTMAN CUP RECORD

WOMEN

Year	Result	Where played	Year	Result	Where played
1923	United States 7, England 0.....	Forest Hills	1936	United States 4, England 3.....	Wimbledon
1924	England 6, United States 1.....	Wimbledon	1937	United States 6, England 1.....	Forest Hills
1925	England 4, United States 3.....	Forest Hills	1938	United States 5, England 2.....	Wimbledon
1926	United States 4, England 3.....	Wimbledon	1939	United States 5, England 2.....	Forest Hills
1927	United States 5, England 2.....	Forest Hills	1940-45	No matches	
1928	England 4, United States 3.....	Wimbledon	1946	United States 7, England 0.....	Wimbledon
1929	United States 4, England 3.....	Forest Hills	1947	United States 7, England 0.....	Forest Hills
1930	England 4, United States 3.....	Wimbledon	1948	United States 6, England 1.....	Wimbledon
1931	United States 5, England 2.....	Forest Hills	1949	United States 7, England 0.....	Haverford
1932	United States 4, England 3.....	Wimbledon	1950	United States 7, England 0.....	Wimbledon
1933	United States 4, England 3.....	Forest Hills	1951	United States 6, England 1.....	Longwood
1934	United States 5, England 2.....	Wimbledon	1952	United States 7, England 0.....	Wimbledon
1935	United States 4, England 3.....	Forest Hills	1953	United States 7, England 0.....	Rye, N. Y.



## UNITED STATES CHAMPIONS

## Men's Singles

1881 Richard D. Sears	1900 Malcolm D. Whitman	1918 R. Lindley Murray	1936 Fred J. Perry
1882 Richard D. Sears	1901 William A. Larned	1919 William Johnston	1937 J. Donald Budge
1883 Richard D. Sears	1902 William A. Larned	1920 William T. Tilden, II	1938 J. Donald Budge
1884 Richard D. Sears	1903 Hugh L. Doherty	1921 William T. Tilden, II	1939 Robert L. Riggs
1885 Richard D. Sears	1904 Holcombe Ward	1922 William T. Tilden, II	1940 Donald McNeill
1886 Richard D. Sears	1905 Beals C. Wright	1923 William T. Tilden, II	1941 Robert L. Riggs
1887 Richard D. Sears	1906 William J. Clothier	1924 William T. Tilden, II	1942 Frederick R. Schroeder, Jr.
1888 Henry W. Slocum, Jr.	1907 William A. Larned	1925 William T. Tilden, II	1943 Lt. (jg) Joseph R. Hunt
1889 Henry W. Slocum, Jr.	1908 William A. Larned	1926 Jean Rene Lacoste	1944 Sgt. Frank A. Parker
1890 Oliver S. Campbell	1909 William A. Larned	1927 Jean Rene Lacoste	1945 Sgt. Frank A. Parker
1891 Oliver S. Campbell	1910 William A. Larned	1928 Henri Cochet	1946 John A. Kramer
1892 Oliver S. Campbell	1911 William A. Larned	1929 William T. Tilden, II	1947 John A. Kramer
1893 Robert D. Wrenn	1912 Maurice E. McLoughlin*	1930 John H. Doeg	1948 Richard Gonzales
1894 Robert D. Wrenn	1913 Maurice E. McLoughlin	1931 H. Ellsworth Vines, Jr.	1949 Richard Gonzales
1895 Fred H. Hovey	1914 R. N. Williams, II	1932 H. Ellsworth Vines, Jr.	1950 Arthur Larsen
1896 Robert D. Wrenn	1915 William Johnston	1933 Fred J. Perry	1951 Frank Sedgman
1897 Robert D. Wrenn	1916 R. N. Williams, II	1934 Fred J. Perry	1952 Frank Sedgman
1898 Malcolm D. Whitman	1917 R. Lindley Murray†	1935 Wilmer L. Allison	1953 Tony Trabert
1899 Malcolm D. Whitman			

\* Challenge round abandoned. † Patriotic tourney.

## Men's Doubles

1881 C. M. Clark—F. W. Taylor	1918 W. T. Tilden, II—Vincent Richards†
1882 R. D. Sears—James Dwight	1919 N. E. Brookes—G. L. Patterson
1883 R. D. Sears—James Dwight	1920 William Johnston—C. J. Griffin
1884 R. D. Sears—James Dwight	1921 W. T. Tilden, II—Vincent Richards
1885 R. D. Sears—J. S. Clark	1922 W. T. Tilden, II—Vincent Richards
1886 R. D. Sears—James Dwight	1923 W. T. Tilden, II—B. I. C. Norton
1887 R. D. Sears—James Dwight	1924 H. O. Kinsey—R. G. Kinsey
1888 O. S. Campbell—V. G. Hall	1925 Vincent Richards—R. N. Williams, II
1889 H. W. Slocum, Jr.—H. A. Taylor	1926 Vincent Richards—R. N. Williams, II
1890 V. G. Hall—Clarence Hobart	1927 W. T. Tilden, II—F. T. Hunter
1891 O. S. Campbell—R. P. Huntington, Jr.	1928 G. M. Lott, Jr.—J. F. Hennessey
1892 O. S. Campbell—R. P. Huntington, Jr.	1929 G. M. Lott, Jr.—J. H. Doeg
1893 Clarence Hobart—F. H. Hovey	1930 G. M. Lott, Jr.—J. H. Doeg
1894 Clarence Hobart—F. H. Hovey	1931 W. L. Allison—John Van Ryn
1895 M. G. Chace—R. D. Wrenn	1932 H. E. Vines, Jr.—Keith Gledhill
1896 C. B. Neel—S. R. Neel	1933 G. M. Lott, Jr.—L. R. Stofen
1897 L. E. Ware—G. P. Sheldon, Jr.	1934 G. M. Lott, Jr.—L. R. Stofen
1898 L. E. Ware—G. P. Sheldon, Jr.	1935 W. L. Allison—John Van Ryn
1899 Holcombe Ward—D. F. Davis	1936 J. D. Budge—C. G. Mako
1900 Holcombe Ward—D. F. Davis	1937 Baron G. von Cramm—Henner Henkel
1901 Holcombe Ward—D. F. Davis	1938 J. D. Budge—C. G. Mako
1902 R. F. Doherty—H. L. Doherty	1939 A. K. Quist—J. E. Bromwich
1903 R. F. Doherty—H. L. Doherty	1940 J. A. Kramer—F. R. Schroeder, Jr.
1904 Holcombe Ward—B. C. Wright	1941 J. A. Kramer—F. R. Schroeder, Jr.
1905 Holcombe Ward—B. C. Wright	1942 Lt. (jg) Gardnar Mulloy—W. F. Talbert
1906 Holcombe Ward—B. C. Wright	1943 J. A. Kramer—Cpl. F. A. Parker
1907 H. H. Hackett—F. B. Alexander	1944 Lt. Don McNeill—a/c Robert Falkenburg
1908 H. H. Hackett—F. B. Alexander	1945 Lt. (sg) Gardnar Mulloy—W. F. Talbert
1909 H. H. Hackett—F. B. Alexander	1946 Gardnar Mulloy—W. F. Talbert
1910 H. H. Hackett—F. B. Alexander	1947 J. A. Kramer—F. R. Schroeder, Jr.
1911 R. D. Little—G. F. Touchard	1948 Gardnar Mulloy—W. F. Talbert
1912 M. E. McLoughlin—T. C. Bundy	1949 John Bromwich—William Sidwell
1913 M. E. McLoughlin—T. C. Bundy	1950 John Bromwich—Frank Sedgman
1914 M. E. McLoughlin—T. C. Bundy	1951 Frank Sedgman—Kenneth McGregor
1915 William Johnston—C. J. Griffin	1952 E. Victor Seixas, Jr.—Mervyn Rose
1916 William Johnston—C. J. Griffin	1953 Mervyn Rose—Rex Hartwig
1917 F. B. Alexander—H. A. Throckmorton*	

\* Patriotic tournament. † Challenge round abandoned.

## 1954 Professional Champions

## WORLD

Singles—Dick Gonzales, Los Angeles

Doubles—Dick Gonzales-Francisco Segura, Los Angeles

## UNITED STATES

Singles—Dick Gonzales

Doubles—Jack Kramer, Los Angeles-Frank Sedgman, Australia

## Clark Wins Tennis Award

Straight Clark of Pasadena, Calif., the fifth-ranking tennis player in the United States, was selected as the winner of the William Johnston Trophy in 1954. The annual award goes to the player who, on the basis of character, sportsmanship and cooperation, makes the biggest contribution to the growth of the sport.

## Women's Singles

1887 Ellen F. Hansell	1904 May G. Sutton	1921 Mrs. Franklin I. Mallory	1938 Alice Marble
1888 Bertha L. Townsend	1905 Elisabeth H. Moore	1922 Mrs. Franklin I. Mallory	1939 Alice Marble
1889 Bertha L. Townsend	1906 Helen Homans	1923 Helen N. Wills	1940 Alice Marble
1890 Ellen C. Roosevelt	1907 Evelyn Sears	1924 Helen N. Wills	1941 Mrs. Sarah P. Cooke
1891 Mabel E. Cahill	1908 Mrs. Maud Bargar-Wallach	1925 Helen N. Wills	1942 Pauline M. Betz
1892 Mabel E. Cahill	1909 Hazel V. Hotchkiss	1926 Mrs. Franklin I. Mallory	1943 Pauline M. Betz
1893 Aline M. Terry	1910 Hazel V. Hotchkiss	1927 Helen N. Wills	1944 Pauline M. Betz
1894 Helen R. Helwig	1911 Hazel V. Hotchkiss	1928 Helen N. Wills	1945 Mrs. Sarah P. Cooke
1895 Juliette P. Atkinson	1912 Mary K. Browne	1929 Helen N. Wills	1946 Pauline M. Betz
1896 Elisabeth H. Moore	1913 Mary K. Browne	1930 Betty Nuthall	1947 A. Louise Brough
1897 Juliette P. Atkinson	1914 Mary K. Browne	1931 Mrs. Helen W. Moody	1948 Mrs. M. O. du Pont
1898 Juliette P. Atkinson	1915 Molla Bjurstedt	1932 Helen Jacobs	1949 Mrs. M. O. du Pont
1899 Marion Jones	1916 Molla Bjurstedt	1933 Helen Jacobs	1950 Mrs. M. O. du Pont
1900 Myrtle McAteer	1917 Molla Bjurstedt*	1934 Helen Jacobs	1951 Maureen Connolly
1901 Elisabeth H. Moore	1918 Molla Bjurstedt†	1935 Helen Jacobs	1952 Maureen Connolly
1902 Marion Jones	1919 Mrs. George W. Wightman	1936 Alice Marble	1953 Maureen Connolly
1903 Elisabeth H. Moore	1920 Mrs. Franklin I. Mallory	1937 Anita Lizana	

\* Louise Hammond won patriotic tourney. † Challenge round abandoned.

## Women's Doubles

1890 Ellen C. Roosevelt—Grace W. Roosevelt	1922 Mrs. J. B. Jessup—Helen N. Wills
1891 Mabel E. Cahill—Mrs. W. F. Morgan	1923 Kathleen McKane—Mrs. B. C. Covell
1892 Mabel E. Cahill—A. M. McKinley	1924 Mrs. G. W. Wightman—Helen N. Wills
1893 Aline M. Terry—Hattie Butler	1925 Mary K. Browne—Helen N. Wills
1894 Helen R. Helwig—J. P. Atkinson	1926 Elizabeth Ryan—Eleanor Goss
1895 Helen R. Helwig—J. P. Atkinson	1927 Mrs. L. A. Godfree—Ermytrude Harvey
1896 E. H. Moore—J. P. Atkinson	1928 Mrs. G. W. Wightman—Helen N. Wills
1897 J. P. Atkinson—Kathleen Atkinson	1929 Mrs. Phoebe Watson—Mrs. L. R. C. Michell
1898 J. P. Atkinson—Kathleen Atkinson	1930 Betty Nuthall—Sarah Palfrey
1899 Jane W. Craven—Myrtle McAteer	1931 Betty Nuthall—Mrs. E. B. Whittingstall
1900 Edith Parker—Hallie Champlin	1932 Helen Jacobs—Sarah Palfrey
1901 J. P. Atkinson—Myrtle McAteer	1933 Betty Nuthall—Freda James
1902 J. P. Atkinson—Marion Jones	1934 Helen Jacobs—Sarah Palfrey
1903 E. H. Moore—Carrie B. Neely	1935 Helen Jacobs—Mrs. S. P. Fabyan
1904 May G. Sutton—Miriam Hall	1936 Mrs. M. G. Van Ryn—Carolyn Babcock
1905 Helen Homans—Carrie B. Neely	1937 Mrs. S. P. Fabyan—Alice Marble
1906 Mrs. L. S. Coe—Mrs. D. S. Platt	1938 Mrs. S. P. Fabyan—Alice Marble
1907 Marie Weimer—Carrie B. Neely	1939 Mrs. S. P. Fabyan—Alice Marble
1908 Evelyn Sears—Margaret Curtis	1940 Mrs. S. P. Fabyan—Alice Marble
1909 Hazel V. Hotchkiss—Edith E. Rotch	1941 Mrs. S. P. Cooke—Margaret Osborne
1910 Hazel V. Hotchkiss—Edith E. Rotch	1942 A. Louise Brough—Margaret Osborne
1911 Hazel V. Hotchkiss—Eleanora Sears	1943 A. Louise Brough—Margaret Osborne
1912 Dorothy Green—Mary K. Browne	1944 A. Louise Brough—Margaret Osborne
1913 Mary K. Browne—Mrs. R. H. Williams	1945 A. Louise Brough—Margaret Osborne
1914 Mary K. Browne—Mrs. R. H. Williams	1946 A. Louise Brough—Margaret Osborne
1915 Mrs. G. W. Wightman—Eleanora Sears	1947 A. Louise Brough—Margaret Osborne
1916 Molla Bjurstedt—Eleanora Sears	1948 A. Louise Brough—Mrs. Margaret O. du Pont
1917 Molla Bjurstedt—Eleanora Sears	1949 A. Louise Brough—Mrs. Margaret O. du Pont
1918 Marion Zinderstein—Eleanor Goss	1950 A. Louise Brough—Mrs. Margaret O. du Pont
1919 Marion Zinderstein—Eleanor Goss	1951 Doris Hart—Shirley Fry
1920 Marion Zinderstein—Eleanor Goss	1952 Doris Hart—Shirley Fry
1921 Mary K. Browne—Mrs. R. H. Williams	1953 Doris Hart—Shirley Fry

## ATHLETES OF THE YEAR

(Associated Press polls)

MALE	FEMALE	MALE	FEMALE
1931—Pepper Martin (baseball); Helene Madison (swimming)		1943—Gunder Hagg (track); Patty Berg (golf)	
1932—Gene Sarazen (golf); Mildred Didrikson (track)		1944—Byron Nelson (golf); Ann Curtis (swimming)	
1933—Carl Hubbell (baseball); Helen Jacobs (tennis)		1945—Byron Nelson (golf); Mildred Didrikson Zaharias (golf)	
1934—Dizzy Dean (baseball); Virginia Van Wie (golf)		1946—Glenn Davis (football); Mildred D. Zaharias (golf)	
1935—Joe Louis (boxing); Helen Wills Moody (tennis)		1947—Johnny Lujack (football); Mildred D. Zaharias (golf)	
1936—Jesse Owens (track); Helen Stephens (track)		1948—Lou Boudreau (baseball); Fanny Blankers-Koen (track)	
1937—Don Budge (tennis); Katherine Rawls (swimming)		1949—Leon Hart (football); Marlene Bauer (golf)	
1938—Don Budge (tennis); Patty Berg (golf)		1950—Jim Konstanty (baseball); Mildred D. Zaharias (golf)	
1939—Nile Kinnick (football); Alice Marble (tennis)		1951—Dick Kazmaier (football); Maureen Connolly (tennis)	
1940—Tommy Harmon (football); Alice Marble (tennis)		1952—Robert Mathias (track and field); Maureen Connolly (tennis)	
1941—Joe DiMaggio (baseball); Betty Hicks Newell (golf)		1953—Ben Hogan (golf); Maureen Connolly (tennis)	
1942—Frank Sinkwich (football); Gloria Callen (swimming)			

## BRITISH LAWN TENNIS CHAMPIONS

## Men's Singles

1877 S. W. Gore	1894 J. Pin	1911 A. F. Wilding	1932 H. E. Vines, Jr.
1878 P. F. Hadow	1895 W. Baddeley	1912 A. F. Wilding	1933 J. H. Crawford
1879 J. T. Hartley	1896 H. S. Mahony	1913 A. F. Wilding	1934 F. J. Perry
1880 J. T. Hartley	1897 R. F. Doherty	1914 N. E. Brookes	1935 F. J. Perry
1881 W. Renshaw	1898 R. F. Doherty	1919 G. L. Patterson	1936 F. J. Perry
1882 W. Renshaw	1899 R. F. Doherty	1920 W. T. Tilden, II	1937 J. D. Budge
1883 W. Renshaw	1900 R. F. Doherty	1921 W. T. Tilden, II	1938 J. D. Budge
1884 W. Renshaw	1901 A. W. Gore	1922 G. L. Patterson*	1939 R. L. Riggs
1885 W. Renshaw	1902 H. L. Doherty	1923 W. M. Johnston	1946 Yvon Petra
1886 W. Renshaw	1903 H. L. Doherty	1924 J. Borotra	1947 John A. Kramer
1887 H. F. Lawford	1904 H. L. Doherty	1925 R. Lacoste	1948 R. Falkenburg
1888 E. Renshaw	1905 H. L. Doherty	1926 J. Borotra	1949 F. R. Schroeder, Jr.
1889 W. Renshaw	1906 H. L. Doherty	1927 H. Cochet	1950 Budge Patty
1890 W. J. Hamilton	1907 N. E. Brookes	1928 R. Lacoste	1951 Richard Savitt
1891 W. Baddeley	1908 A. W. Gore	1929 H. Cochet	1952 Frank Sedgman
1892 W. Baddeley	1909 A. W. Gore	1930 W. T. Tilden, II	1953 E. Victor Seixas, Jr.
1893 J. Pin	1910 A. F. Wilding	1931 S. B. Wood	

\* Challenge round abandoned.

## Men's Doubles

1879 L. R. Erskine—H. F. Lawford	1900 R. F. Doherty—H. L. Doherty	1925 J. Borotra—R. Lacoste
1880 W. Renshaw—E. Renshaw	1901 R. F. Doherty—H. L. Doherty	1926 H. Cochet—J. Brugnon
1881 W. Renshaw—E. Renshaw	1902 S. H. Smith—F. L. Riseley	1927 W. T. Tilden, II—F. T. Hunter
1882 J. T. Hartley—R. T. Richardson	1903 R. F. Doherty—H. L. Doherty	1928 H. Cochet—J. Brugnon
1883 C. W. Grinstead—C. E. Welldon	1904 R. F. Doherty—H. L. Doherty	1929-30 W. Allison—J. Van Ryn
1884 W. Renshaw—E. Renshaw	1905 R. F. Doherty—H. L. Doherty	1931 G. M. Lott—J. Van Ryn
1885 W. Renshaw—E. Renshaw	1906 S. H. Smith—F. L. Riseley	1932 J. Borotra—J. Brugnon
1886 W. Renshaw—E. Renshaw	1907 N. E. Brookes—A. F. Wilding	1933 J. Borotra—J. Brugnon
1887 P. Bowes-Lyon—H. W. W. Wilberforce	1908 A. F. Wilding—M. J. G. Ritchie	1934 G. M. Lott—L. R. Stoefen
	1909 A. W. Gore—H. R. Barrett	1935 J. H. Crawford—A. K. Quist
1888 W. Renshaw—E. Renshaw	1910 A. F. Wilding—M. J. G. Ritchie	1936 C. R. D. Tuckey—G. P. Hughes
1889 W. Renshaw—E. Renshaw	1911 M. Decugis—A. H. Gobert	1937 J. D. Budge—C. Gene Mako
1890 J. L. Pim—F. O. Stoker	1912 H. R. Barrett—C. P. Dixon	1938 J. D. Budge—C. Gene Mako
1891 W. Baddeley—H. Baddeley	1913 H. R. Barrett—C. P. Dixon	1939 R. L. Riggs—E. T. Cooke
1892 H. S. Barlow—E. W. Lewis	1914 N. E. Brookes—A. F. Wilding	1946 J. A. Kramer—Tom Brown
1893 J. L. Pim—F. O. Stoker	1919 R. V. Thomas—P. O'Hara Wood	1947 J. A. Kramer—R. Falkenburg
1894 W. Baddeley—H. Baddeley	1920 R. N. Williams, II—C. S. Garland	1948 J. Bromwich—F. Sedgman
1895 W. Baddeley—H. Baddeley	1921 R. Lycett—M. Woosnam	1949 F. Parker—R. Gonzales
1896 W. Baddeley—H. Baddeley	1922 R. Lycett—J. O. Anderson*	1950 J. Bromwich—A. Quist
1897 R. F. Doherty—H. L. Doherty	1923 R. Lycett—L. A. Godfree	1951 F. Sedgman—K. McGregor
1898 R. F. Doherty—H. L. Doherty	1924 V. Richards—F. T. Hunter	1952 F. Sedgman—K. McGregor
1899 R. F. Doherty—H. L. Doherty		1953 K. Rosewall—L. Hoad

\* Challenge round abandoned.

## Women's Singles

1884 M. Watson	1899 Mrs. Hillyard	1914 Mrs. L. Chambers	1932 Mrs. F. S. Moody
1885 M. Watson	1900 Mrs. Hillyard	1915-18 No tournaments	1933 Mrs. F. S. Moody
1886 Miss Bingley	1901 Mrs. Sterry	1919 Mlle. Lenglen	1934 D. E. Round
1887 L. Dod	1902 M. E. Robb	1920 Mlle. Lenglen	1935 Mrs. F. S. Moody
1888 L. Dod	1903 Miss Douglas	1921 Mlle. Lenglen	1936 H. H. Jacobs
1889 Mrs. Hillyard	1904 Miss Douglas	1922 Mlle. Lenglen	1937 D. E. Round
1890 L. Rice	1905 M. Sutton	1923 Mlle. Lenglen	1938 Mrs. F. S. Moody
1891 L. Dod	1906 Miss Douglas	1924 K. McKane	1939 A. Marble
1892 L. Dod	1907 M. Sutton	1925 Mlle. Lenglen	1946 Pauline M. Betz
1893 L. Dod	1908 Mrs. Sterry	1926 Mrs. Godfree	1947 Margaret Osborne
1894 Mrs. Hillyard	1909 D. Boothby	1927 H. Wills	1948 A. Louise Brough
1895 C. Cooper	1910 Mrs. L. Chambers	1928 H. Wills	1949 A. Louise Brough
1896 C. Cooper	1911 Mrs. L. Chambers	1929 H. Wills	1950 A. Louise Brough
1897 Mrs. Hillyard	1912 Mrs. Larcombe	1930 Mrs. F. S. Moody	1951 Doris Hart
1898 C. Cooper	1913 Mrs. L. Chambers	1931 Frl. C. Aussen	1952-53 M. Connolly

## Women's Doubles

1913 Mrs. McNair—Miss Boothby	1928 Mrs. H. Watson—P. Saunders	1937 Mme. S. Mathieu—A. M. Yorke
1914 Miss Ryan—A. M. Morton	1929 Mrs. H. Watson—Mrs. Michell	1938 A. Marble—Mrs. S. P. Fabyan
1919 Mlle. Lenglen—Miss Ryan	1930 Miss Ryan—Mrs. F. S. Moody	1939 A. Marble—Mrs. S. P. Fabyan
1920 Mlle. Lenglen—Miss Ryan	1931 Mrs. Shepherd-Barron—Mrs. Mudford King	1946 A. L. Brough—M. Osborne
1921 Mlle. Lenglen—Miss Ryan		1947 Doris Hart—Mrs. Pat Todd
1922 Mlle. Lenglen—Miss Ryan	1932 Mlle. D. Metaxa—Mlle. J. Sigart	1948 A. L. Brough—Mrs. M. O. du Pont
1923 Mlle. Lenglen—Miss Ryan	1933 Miss Ryan—Mme. Mathieu	1949 A. L. Brough—Mrs. M. O. du Pont
1924 Mrs. Wightman—H. Wills	1934 Miss Ryan—Mme. Mathieu	1950 A. L. Brough—Mrs. M. O. du Pont
1925 Mlle. Lenglen—Miss Ryan	1935 K. E. Stammers—F. James	1951 Doris Hart—Shirley Fry
1926 Miss Ryan—M. K. Browne	1936 K. E. Stammers—F. James	1952-53 Doris Hart—Shirley Fry
1927 Miss Ryan—H. Wills		



## THE OLYMPIC GAMES

(W)—Site of Winter Games. (S)—Site of Summer Games.

1896—Athens	1912—Stockholm	1928—Amsterdam (S)	1936—Berlin (S)
1900—Paris	1920—Antwerp	1932—Lake Placid (W)	1948—St. Moritz (W)
1904—St. Louis	1924—Chamonix (W)	1932—Los Angeles (S)	1948—London (S)
1906—Athens	1924—Paris (S)	1936—Garmisch-Parten-	1952—Oslo (W)
1908—London	1928—St. Moritz (W)	kirchen (W)	1952—Helsinki (S)

**T**HE first Olympic Games of which there is record occurred in 776 B.C. and consisted of one event, a great foot race of about 200 yards held on a plain by the River Alpheus (now the Ruphla) just outside the little town of Olympia in Greece. It was from that date that the Greeks began to keep their calendar by "Olympiads," the four-year spans between the celebrations of the famous games. There was a religious as well as an athletic significance to the ancient games and the shrines, temples and sacred fires within the Olympic enclosure were the scenes of worship all through the year whereas the Olympic Games, at the height of their popularity, never lasted more than five days and were held only once every four years.

The competition was entirely amateur at the start and the only prizes were laurel wreaths. Only free Greek citizens were allowed to compete and they had to undergo a strict training course that lasted ten months. But civic rivalry led to trickery and professionalism and the

games became degraded after some centuries. When Rome conquered Greece, the Roman emperors turned the Olympic Games from patriotic, religious and athletic festivals into carnivals and circuses. They dragged on malodorously until they were finally halted by decree of Emperor Theodosius I of Rome in A.D. 394.

The modern Olympic Games, which started in Athens in 1896, are the result of the devotion of a French educator, Baron Pierre de Coubertin, to the idea that, since boys and athletics have gone together down the ages, education and athletics might well go hand-in-hand toward a better international understanding. He planned a revival of the ancient Olympic Games on a world-wide basis and succeeded in getting nine nations to send athletes to the first of the modern games in 1896. Since then more than 29,000 athletes representing 58 nations have competed in the games.

Interrupted for the second time by war, the modern Olympic Games were resumed at London in 1948.

## OLYMPIC GAMES CHAMPIONS, 1896-1952

Source: United States Olympic Association

### TRACK AND FIELD—MEN

#### 60-Meter Run

1900	A. E. Kraenzlein, United States.....	7s.
1904	Archie Hahn, United States.....	7s.

#### 100-Meter Run

1896	T. E. Burke, United States.....	12s.
1900	F. W. Jarvis, United States.....	10.8s.
1904	Archie Hahn, United States.....	11s.
1906	Archie Hahn, United States.....	11.2s.
1908	R. E. Walker, South Africa.....	10.8s.
1912	R. C. Craig, United States.....	10.8s.
1920	C. W. Paddock, United States.....	10.8s.
1924	H. M. Abrahams, Great Britain.....	10.6s.
1928	Percy Williams, Canada.....	10.8s.
1932	Eddie Tolan, United States.....	10.3s.
1936	Jesse Owens, United States.....	10.3s.*
1948	Harrison Dillard, United States.....	10.3s.
1952	Lindy Remigino, United States.....	10.4s.

\* With the wind.

#### 200-Meter Run

1900	J. W. B. Tewksbury, United States.....	22.2s.
1904	Archie Hahn, United States.....	21.6s.

1908	R. Kerr, Canada.....	22.4s.
1912	R. C. Craig, United States.....	21.7s.
1920	Allan Woodring, United States.....	22s. .
1924	J. V. Scholz, United States.....	21.6s.
1928	Percy Williams, Canada.....	21.8s.
1932	Eddie Tolan, United States.....	21.2s.
1936	Jesse Owens, United States.....	20.7s.
1948	Melvin E. Patton, United States.....	21.1s.
1952	Andrew Stanfield, United States.....	20.7s.

#### 400-Meter Run

1896	T. E. Burke, United States.....	54.2.
1900	M. W. Long, United States.....	49.4.
1904	H. L. Hillman, United States.....	49.2.
1906	Paul Pilgrim, United States.....	53.2.
1908	W. Halswelle, Great Britain (walkover).....	50s.
1912	C. D. Reidpath, United States.....	48.2s.
1920	B. G. D. Rudd, South Africa.....	49.6s.
1924	E. H. Liddell, Great Britain.....	47.6s.
1928	Ray Barbuti, United States.....	47.8s.
1932	William Carr, United States.....	46.2s.
1936	Archie Williams, United States.....	46.5s.
1948	Arthur Wint, Jamaica, B.W.I.....	46.2s.
1952	George Rhoden, Jamaica, B. W. I.....	45.9s.

**800-Meter Run**

1896	E. H. Flack, Great Britain	2m.11s.
1900	A. E. Tysoe, Great Britain	2m.1.4s.
1904	J. D. Lightbody, United States	1m.56s.
1906	Paul Pilgrim, United States	2m.1.2s.
1908	M. W. Sheppard, United States	1m.52.8s.
1912	J. E. Meredith, United States	1m.51.9s.
1920	A. G. Hill, Great Britain	1m.53.4s.
1924	D. G. A. Lowe, Great Britain	1m.52.4s.
1928	D. G. A. Lowe, Great Britain	1m.51.8s.
1932	Thomas Hampson, Great Britain	1m.49.8s.
1936	John Woodruff, United States	1m.52.9s.
1948	Malvin Whitfield, United States	1m.49.2s.
1952	Malvin Whitfield, United States	1m.49.2s.

**1,500-Meter Run**

1896	E. H. Flack, Great Britain	4m.33.2s.
1900	C. Bennett, Great Britain	4m.6s.
1904	J. D. Lightbody, United States	4m.5.4s.
1906	J. D. Lightbody, United States	4m.12s.
1908	M. W. Sheppard, United States	4m.3.4s.
1912	A. N. S. Jackson, Great Britain	3m.56.8s.
1920	A. G. Hill, Great Britain	4m.1.8s.
1924	Paavo Nurmi, Finland	3m.53.6s.
1928	H. E. Larva, Finland	3m.53.2s.
1932	Luigi Beccali, Italy	3m.51.2s.
1936	J. E. Lovelock, New Zealand	3m.47.8s.
1948	Henri Eriksson, Sweden	3m.49.8s.
1952	Joseph Barthel, Luxemburg	3m.45.2s.

**5,000-Meter Run**

1912	H. Kolehmainen, Finland	14m.36.6s.
1920	J. Guillemot, France	14m.55.6s.
1924	Paavo Nurmi, Finland	14m.31.2s.
1928	Willie Ritola, Finland	14m.38s.
1932	Lauri Lehtinen, Finland	14m.30s.
1936	Gunnar Hockert, Finland	14m.22.2s.
1948	Gaston Reiff, Belgium	14m.17.6s.
1952	Emil Zatopek, Czechoslovakia	14m.6.6s.

**5-Mile Run**

1906	H. Hawtrey, Great Britain	26m.26.2s.
1908	E. R. Voigt, Great Britain	25m.11.2s.

**10,000-Meter Run**

1912	H. Kolehmainen, Finland	31m.20.8s.
1920	Paavo Nurmi, Finland	31m.45.8s.
1924	Willie Ritola, Finland	30m.23.2s.
1928	Paavo Nurmi, Finland	30m.18.8s.
1932	Janusz Kusocinski, Poland	30m.11.4s.
1936	Ilmari Salminen, Finland	30m.15.4s.
1948	Emil Zatopek, Czechoslovakia	29m.59.6s.
1952	Emil Zatopek, Czechoslovakia	29m.17s.

**Marathon**

1896	S. Loues, Greece	2h.55m.20s.
1900	M. Teato, France	2h.59m.
1904	T. J. Hicks, United States	3h.28m.53s.
1906	W. J. Sherring, Canada	2h.51m.23.6s.
1908	John J. Hayes, United States	2h.55m.18.4s.
1912	K. K. McArthur, South Africa	2h.36m.54.8s.
1920	H. Kolehmainen, Finland	2h.32m.35.8s.
1924	A. O. Stenroos, Finland	2h.41m.22.6s.
1928	El Ouafi, France	2h.32m.57s.
1932	Juan Zabala, Argentina	2h.31m.36s.
1936	Kitei Son, Japan	2h.29m.19.2s.
1948	Delfo Cabrera, Argentina	2h.34m.51.6s.
1952	Emil Zatopek, Czechoslovakia	2h.23m.3.2s.

**110-Meter Hurdles**

1896	Curtis, United States	17.6s.
1900	A. E. Kraenzlein, United States	15.4s.
1904	F. W. Schule, United States	16s.
1906	R. G. Leavitt, United States	16.2s.
1908	Forrest Smithson, United States	15s.
1912	F. W. Kelly, United States	15.1s.

1920	E. J. Thomson, Canada	14.8s.
1924	D. C. Kinsey, United States	15s.
1928	S. Atkinson, South Africa	14.8s.
1932	George Saling, United States	14.6s.
1936	Forrest Towns, United States	14.2s.
1948	William Porter, United States	13.9s.
1952	Harrison Dillard, United States	13.7s.

**200-Meter Hurdles**

1900	A. E. Kraenzlein, United States	25.4s.
1904	H. L. Hillman, United States	24.6s.

**400-Meter Hurdles**

1900	J. W. B. Tewksbury, United States	57.6s.
1904	H. L. Hillman, United States	53s.
1908	C. J. Bacon, United States	55s.
1920	F. F. Loomis, United States	54s.
1924	F. M. Taylor, United States	52.6s.
1928	Lord David Burghley, Great Britain	53.4s.
1932	Robert Tisdall, Ireland	51.8s.*
1936	Glenn Hardin, United States	52.4s.
1948	Roy Cochran, United States	51.1s.
1952	Charles Moore, United States	50.8s.

\* Record not allowed.

**2,500-Meter Steeplechase**

1900	G. W. Orton, United States	7m.34s.
1904	J. D. Lightbody, United States	7m.39.6s.

**3,000-Meter Steeplechase**

1920	P. Hodge, Great Britain	10m.2.4s.
1924	Willie Ritola, Finland	9m.33.6s.
1928	T. A. Loukola, Finland	9m.21.8s.
1932	Volmari Iso-Hollo, Finland	10m.33.4s.*
1936	Volmari Iso-Hollo, Finland	9m.3.8s.
1948	Thore Sjostrand, Sweden	9m.4.6s.
1952	Horace Ashenfelter, United States	8m.45.4s.

\* About 3,450 meters—extra lap by error.

**3,200-Meter Steeplechase**

1908	A. Russell, Great Britain	10m.47.8s.
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**4,000-Meter Steeplechase**

1900	C. Rimmer, Great Britain	12m.58.4s.
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**3,000-Meter Team**

1912	United States	9 pts.
1920	United States	10 pts.
1924	Finland	8 pts.

**3-Mile Team**

1908	Great Britain	6 pts.
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**8,000-Meter X-Country**

1912	H. Kolehmainen, Finland	45m.11.6s.
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**8,000-Meter X-Country Team**

1912	Sweden	
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**10,000-Meter X-Country**

1920	Paavo Nurmi, Finland	27m.15s.
1924	Paavo Nurmi, Finland	32m.54.8s.

**10,000-Meter X-Country Team**

1912	Sweden	10 pts.
1920	Finland	10 pts.
1924	Finland	11 pts.

**1,500-Meter Walk**

1906	George V. Bonhag, United States	7m.12.6s.
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**3,000-Meter Walk**

1906	G. Stantics, Hungary	
1920	Ugo Frigerio, Italy	13m.14.2s.

**3,500-Meter Walk**

1908	G. E. Larner, Great Britain	14m.55s.
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**10,000-Meter Walk**

1912	G. H. Goulding, Canada.....	46m.28.4s.
1920	Ugo Frigerio, Italy.....	48m.6.2s.
1924	Ugo Frigerio, Italy.....	47m.49s.
1948	John Mikaelsson, Sweden.....	45m.13.2s.
1952	John Mikaelsson, Sweden.....	45m.2.8s.

**10-Mile Walk**

1908	G. E. Larner, Great Britain.....	1h.15m.57.4s.
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**50,000-Meter Walk**

1932	Thomas W. Green, Great Britain.....	4h.50m.10s.
1936	Harold Whitlock, Great Britain.....	4h.30m.41.4s.
1948	John Ljunggren, Sweden.....	4h.41m.52s.
1952	Giuseppe Bordonì, Italy.....	4h.28m.7.8s.

**400-Meter Relay**

1912	Great Britain.....	42.4s.
1920	United States.....	42.2s.
1924	United States.....	41s.
1928	United States.....	41s.
1932	United States.....	40s.
1936	United States.....	39.8s.
1948	United States.....	40.6s.
1952	United States.....	40.1s.

**1,600-Meter Relay**

1908	United States.....	3m.27.2s.
1912	United States.....	3m.16.6s.
1920	Great Britain.....	3m.22.2s.
1924	United States.....	3m.16s.
1928	United States.....	3m.14.2s.
1932	United States.....	3m.8.2s.
1936	Great Britain.....	3m.9s.
1948	United States.....	3m.10.4s.
1952	Jamaica, B. W. I.....	3m.3.9s.

**Pole Vault**

1896	W. W. Hoyt, United States.....	10 ft. 9½ in.
1900	I. K. Baxter, United States.....	10 ft. 9.9 in.
1904	C. E. Dvorak, United States.....	11 ft. 6 in.
1906	Gonder, France.....	11 ft. 6 in.
1908	A. C. Gilbert, United States.....	12 ft. 2 in.
	E. T. Cook, Jr., United States.....	
1912	H. J. Babcock, United States.....	12 ft. 11½ in.
1920	F. K. Foss, United States.....	13 ft. 5 in.
1924	L. S. Barnes, United States.....	12 ft. 11½ in.
1928	Sabin W. Carr, United States.....	13 ft. 9½ in.
1932	William Miller, United States.....	14 ft. 1½ in.
1936	Earle Meadows, United States.....	14 ft. 3¼ in.
1948	Guinn Smith, United States.....	14 ft. 1¼ in.
1952	Robert Richards, United States.....	14 ft. 11.14 in.

**Standing High Jump**

1900	R. C. Ewry, United States.....	5 ft. 5 in.
1904	R. C. Ewry, United States.....	4 ft. 11 in.
1906	R. C. Ewry, United States.....	5 ft. 1½ in.
1908	R. C. Ewry, United States.....	5 ft. 2 in.
1912	Platt Adams, United States.....	5 ft. 4½ in.

**Running High Jump**

1896	E. H. Clark, United States.....	5 ft. 11½ in.
1900	I. K. Baxter, United States.....	6 ft. 2½ in.
1904	S. S. Jones, United States.....	5 ft. 11 in.
1906	Con Leahy, Ireland.....	5 ft. 9½ in.
1908	H. F. Porter, United States.....	6 ft. 3 in.
1912	A. W. Richards, United States.....	6 ft. 4 in.
1920	R. W. Landon, United States.....	6 ft. 4¼ in.
1924	H. M. Osborn, United States.....	6 ft. 5½ in.
1928	Robert W. King, United States.....	6 ft. 4 in.
1932	Duncan McNaughton, Canada.....	6 ft. 5½ in.
1936	Cornelius Johnson, United States.....	6 ft. 7½ in.
1948	John Winter, Australia.....	6 ft. 6 in.
1952	Walter Davis, United States.....	6 ft. 8.32 in.

**Standing Broad Jump**

1900	R. C. Ewry, United States.....	10 ft. 6½ in.
1904	R. C. Ewry, United States.....	11 ft. 4½ in.
1906	R. C. Ewry, United States.....	10 ft. 10 in.
1908	R. C. Ewry, United States.....	10 ft. 11½ in.
1912	C. Tscilitiras, Greece.....	11 ft. ¼ in.

**Running Broad Jump**

1896	E. H. Clark, United States.....	20 ft. 9½ in.
1900	A. E. Kraenzlein, United States.....	23 ft. 6½ in.
1904	Myer Prinstein, United States.....	24 ft. 1 in.
1906	Myer Prinstein, United States.....	23 ft. 7½ in.
1908	Frank Irons, United States.....	24 ft. 6½ in.
1912	A. L. Gutterson, United States.....	24 ft. 11½ in.
1920	Wm. Petterson, Sweden.....	23 ft. 5½ in.
1924	DeHart Hubbard, United States.....	24 ft. 5½ in.
1928	Edward B. Hamm, United States.....	25 ft. 4¼ in.
1932	Edward Gordon, United States.....	25 ft. ¾ in.
1936	Jesse Owens, United States.....	26 ft. 5½ in.
1948	Willie Steele, United States.....	25 ft. 8 in.
1952	Jerome Biffle, United States.....	24 ft. 10.03 in.

**Standing Hop, Step, and Jump**

1900	R. C. Ewry, United States.....	34 ft. 8½ in.
1904	R. C. Ewry, United States.....	34 ft. 7¼ in.

**Running Hop, Step, and Jump**

1896	J. B. Connolly, United States.....	45 ft.
1900	Myer Prinstein, United States.....	47 ft. 4¼ in.
1904	Myer Prinstein, United States.....	47 ft.
1906	P. O'Connor, Ireland.....	46 ft. 2 in.
1908	T. J. Ahearne, Great Britain.....	48 ft. 11½ in.
1912	G. Lindblom, Sweden.....	48 ft. 5½ in.
1920	V. Tuulos, Finland.....	47 ft. 6½ in.
1924	A. W. Winter, Australia.....	50 ft. 11½ in.
1928	Mikio Oda, Japan.....	49 ft. 10¾ in.
1932	Chuhei Nambu, Japan.....	51 ft. 7 in.
1936	Naoto Tajima, Japan.....	52 ft. 5½ in.
1948	Arne Ahman, Sweden.....	50 ft. 6½ in.
1952	Adhemar da Silva, Brazil.....	53 ft. 2.59 in.

**16-Lb. Shot-put**

1896	Robert Garrett, United States.....	36 ft. 2 in.
1900	R. Sheldon, United States.....	46 ft. 3¼ in.
1904	Ralph Rose, United States.....	48 ft. 7 in.
1906	M. J. Sheridan, United States.....	40 ft. 4½ in.
1908	Ralph Rose, United States.....	46 ft. 7½ in.
1912	P. J. McDonald, United States.....	50 ft. 4 in.
1920	V. Porhola, Finland.....	48 ft. 7½ in.
1924	Clarence Houser, United States.....	49 ft. 2½ in.
1928	John Kuck, United States.....	52 ft. 1¼ in.
1932	Leo Sexton, United States.....	52 ft. 6½ in.
1936	Hans Woellke, Germany.....	53 ft. 1½ in.
1948	Wilbur Thompson, United States.....	56 ft. 2 in.
1952	Parry O'Brien, United States.....	57 ft. 1.43 in.

**16-Lb. Shot-put (Both Hands)**

1912	Ralph Rose, United States.....	90 ft. 5½ in.
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**16-Lb. Hammer Throw**

1900	J. J. Flanagan, United States.....	167 ft. 4 in.
1904	J. J. Flanagan, United States.....	168 ft. 1 in.
1908	J. J. Flanagan, United States.....	170 ft. 4¼ in.
1912	M. J. McGrath, United States.....	177 ft. 7 in.
1920	P. J. Ryan, United States.....	173 ft. 5½ in.
1924	F. D. Tootell, United States.....	174 ft. 10¼ in.
1928	Patrick O'Callaghan, Ireland.....	168 ft. 7½ in.
1932	Patrick O'Callaghan, Ireland.....	176 ft. 11½ in.
1936	Karl Hein, Germany.....	185 ft. 4 in.
1948	Imre Nemeth, Hungary.....	183 ft. 11½ in.
1952	Jozsef Csermak, Hungary.....	197 ft. 11.67 in.

**56-Lb. Weight Throw**

1904	E. Desmarteau, Canada.....	34 ft. 4 in.
1920	P. J. McDonald, United States.....	36 ft. 11½ in.



**Discus Throw**

1896	Robert Garrett, United States.....	95 ft. 7½ in.
1900	R. Bauer, Hungary.....	118 ft. 2.9 in.
1904	M. J. Sheridan, United States.....	128 ft. 10½ in.
1906	M. J. Sheridan, United States.....	136 ft. ½ in.
1908	M. J. Sheridan, United States.....	134 ft. 2 in.
1912	A. R. Taipale, Finland.....	148 ft. 3.9 in.
1920	E. Niklander, Finland.....	146 ft. 7 in.
1924	Clarence Houser, United States.....	151 ft. 5¼ in.
1928	Clarence Houser, United States.....	155 ft. 2¼ in.
1932	John Anderson, United States.....	162 ft. 4¾ in.
1936	Ken Carpenter, United States.....	165 ft. 7¾ in.
1948	Adolfo Consolini, Italy.....	173 ft. 2 in.
1952	Simeon Iness, United States.....	180 ft. 6.85 in.

**Discus Throw—Greek Style**

1906	W. Jaervinen, Finland.....	115 ft. 4 in.
1908	M. J. Sheridan, United States.....	124 ft. 8 in.

**Javelin Throw (Right and Left Hand)**

1912	A. R. Taipale, Finland.....	271 ft. 10½ in.
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**Javelin Throw**

1906	E. Lemming, Sweden.....	175 ft. 6 in.
1908	E. Lemming, Sweden.....	179 ft. 10½ in.
1912	E. Lemming, Sweden.....	198 ft. 11¼ in.
1920	Jonni Myyra, Finland.....	215 ft. 9¼ in.
1924	Jonni Myyra, Finland.....	206 ft. 6¾ in.
1928	E. H. Lundquist, Sweden.....	218 ft. 6½ in.
1932	Matti Jarvinen, Finland.....	238 ft. 7 in.
1936	Gerhard Stoeck, Germany.....	235 ft. 8¾ in.
1948	Kaj Rautavaara, Finland.....	228 ft. 10½ in.
1952	Cy Young, United States.....	242 ft. 0.79 in.

**Javelin Throw—Free Style**

1908	E. Lemming, Sweden.....	178 ft. 7½ in.
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**Javelin Throw (Both Hands)**

1912	J. J. Saaristo, Finland.....	358 ft. 11½ in.
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**Pentathlon**

1906	H. Mellander, Sweden.....	24 pts.
1912	F. R. Bie, Norway.....	21 pts.
1920	E. R. Lehtonen, Finland.....	14 pts.
1924	E. R. Lehtonen, Finland.....	16 pts.

**Decathlon**

1912	H. Wieslander, Sweden.....	7,724.495 pts.
1920	H. Lovland, Norway.....	6,804.35 pts.
1924	H. M. Osborn, United States.....	7,710.775 pts.
1928	Paavo Yrjola, Finland.....	8,053.29 pts.
1932	James Bausch, United States.....	8,462.23 pts.
1936	Glenn Morris, United States.....	7,900 pts.
1948	Robert B. Mathias, United States.....	7,139 pts.
1952	Robert B. Mathias, United States.....	7,887 pts.

(Old point system used from 1912 to 1932; new point system used in 1936 and 1948; revised point system used in 1952.)

**TRACK AND FIELD—WOMEN****100-Meter Run**

1928	Elizabeth Robinson, United States.....	12.2s.
1932	Stanislawa Walasiewicz, Poland.....	11.9s.
1936	Helen Stephens, United States.....	11.5s.
1948	Fanny Blankers-Koen, Holland.....	11.9s.
1952	Marjorie Jackson, Australia.....	11.5s.

**200-Meter Run**

1948	Fanny Blankers-Koen, Holland.....	24.4s.
1952	Marjorie Jackson, Australia.....	23.7s.

**800-Meter Run**

1928	Lina Radke, Germany.....	2m.16.8s.
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**80-Meter Hurdles**

1932	Mildred Didrikson, United States.....	11.7s.
1936	Trebisonda Valla, Italy.....	11.7s.
1948	Fanny Blankers-Koen, Holland.....	11.2s.
1952	Shirley S. de la Hunty, Australia.....	10.9s.

**400-Meter Relay**

1928	Canada.....	48.4s.
1932	United States.....	47s.
1936	United States.....	46.9s.
1948	Holland.....	47.5s.
1952	United States.....	45.9s.

**Running High Jump**

1928	Ethel Catherwood, Canada.....	5 ft. 3 in.
1932	Jean Shiley, United States.....	5 ft. 5¼ in.
1936	Ibolya Csak, Hungary.....	5 ft. 3 in.
1948	Alice Coachman, United States.....	5 ft. 6¼ in.
1952	Ester Brand, South Africa.....	5 ft. 5.75 in.

**Running Broad Jump**

1948	V. O. Gyarmati, Hungary.....	18 ft. 8¼ in.
1952	Yvette Williams, New Zealand.....	20 ft. 5.66 in.

**Discus Throw**

1928	H. Konopacka, Poland.....	129 ft. 11½ in.
1932	Lillian Caperack, United States.....	133 ft. 2 in.
1936	Gisela Mauermayer, Germany.....	156 ft. 3¾ in.
1948	Micheline Ostermeyer, France.....	137 ft. 6½ in.
1952	Nina Romaschkova, Russia.....	168 ft. 8.5 in.

**Javelin Throw**

1932	Mildred Didrikson, United States.....	143 ft. 4 in.
1936	Tilly Fleischer, Germany.....	148 ft. 2¼ in.
1948	H. Bauma, Austria.....	149 ft. 6 in.
1952	Dana Zatoppek, Czechoslovakia.....	165 ft. 7.05 in.

**Shot-put**

1948	Micheline Ostermeyer, France.....	45 ft. 1½ in.
1952	Galina Zybina, Russia.....	50 ft. 2.58 in.

**SWIMMING—MEN****50 Yards**

1904	Zoltan de Halomay, Hungary.....	28s.
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**100 Meters**

1896	Alfred Hajos, Hungary.....	1m.22.2s.
1904	Zoltan de Halomay, Hungary.....	1m.2.8s.*
1906	C. M. Daniels, United States.....	1m.13s.
1908	C. M. Daniels, United States.....	1m.5.6s.
1912	Duke P. Kahanamoku, United States.....	1m.3.4s.
1920	Duke P. Kahanamoku, United States.....	1m.1.4s.
1924	John Weissmuller, United States.....	59s.
1928	John Weissmuller, United States.....	58.6s.
1932	Yasuji Miyazaki, Japan.....	58.2s.
1936	Ferenc Csik, Hungary.....	57.6s.
1948	Walter Ris, United States.....	57.3s.
1952	Clarke Scholes, United States.....	57.4s.

\* 100 yards.

**220 Yards**

1900	F. C. V. Lane, Australia.....	
1904	C. M. Daniels, United States.....	2m.44.2s.

**400 Meters**

1904	C. M. Daniels, United States.....	6m.16.2s.*
1906	Otto Sheff, Austria.....	6m.23.8s.
1908	H. Taylor, Great Britain.....	5m.36.8s.
1912	G. R. Hodgson, Canada.....	5m.24.4s.
1920	N. Ross, United States.....	5m.26.8s.
1924	John Weissmuller, United States.....	5m.4.2s.
1928	Albert Zorilla, Argentina.....	5m.1.6s.
1932	Clarence Crabbe, United States.....	4m.48.4s.
1936	Jack Medica, United States.....	4m.44.5s.
1948	William Smith, United States.....	4m.41s.
1952	Jean Boiteux, France.....	4m.30.7s.

\* 440 yards.

**500 Meters**

1896 Paul Neumann, Austria

**880 Yards**

1904 Emil Rausch, Germany..... 13m.11.4s.

**1,000 Meters**

1900 Jarvis, Great Britain

**1,200 Meters**

1896 Alfred Hajos, Hungary

**1,500 Meters**

1908 H. Taylor, Great Britain..... 22m.48.4s.

1912 G. R. Hodgson, Canada..... 22m.

1920 N. Ross, United States..... 22m.23.2s.

1924 A. M. Charlton, Australia..... 20m.6.6s.

1928 Arne Borg, Sweden..... 19m.51.8s.

1932 Kusuo Kitamura, Japan..... 19m.12.4s.

1936 Noboru Terada, Japan..... 19m.13.7s.

1948 James McLane, United States..... 19m.18.5s.

1952 Ford Konno, United States..... 18m.30s.

**1,600 Meters**

1906 H. Taylor, Great Britain..... 28m.28s.

**One Mile**

1904 Emil Rausch, Germany..... 27m.18.2s.

**Plunge for Distance**

1904 W. E. Dickey, United States..... 62 ft. 6 in.

**800-Meter Relay**

1908 Great Britain..... 10m.55.6s.

1912 Australia..... 10m.11.6s.

1920 United States..... 10m.4.4s.

1924 United States..... 9m.53.4s.

1928 United States..... 9m.36.2s.

1932 Japan..... 8m.58.4s.

1936 Japan..... 8m.51.5s.

1948 United States..... 8m.46s.

1952 United States..... 8m.31.1s.

**100-Meter Backstroke**

1904 Walter Brack, Germany..... 1m.16.8s.\*

1908 Arno Bieberstein, Germany..... 1m.24.6s.

1912 Harry Hebner, United States..... 1m.21.2s.

1920 Warren Kealoha, United States..... 1m.15.2s.

1924 Warren Kealoha, United States..... 1m.13.2s.

1928 George Kojac, United States..... 1m.8.2s.

1932 Masaji Kiyokawa, Japan..... 1m.8.6s.

1936 Adolph Kiefer, United States..... 1m.5.9s.

1948 Allen Stack, United States..... 1m.6.4s.

1952 Yoshinobu Oyakawa, United States..... 1m.5.4s.

\* 100 yards.

**200-Meter Breast Stroke**

1908 F. Holman, Great Britain..... 3m.9.2s.

1912 Walter Bathe, Germany..... 3m.1.8s.

1920 H. Malmroth, Sweden..... 3m.4.4s.

1924 R. D. Skelton, United States..... 2m.56.6s.

1928 Y. Tsuruta, Japan..... 2m.48.8s.

1932 Yoshiyuki Tsuruta, Japan..... 2m.45.4s.

1936 Tetsuo Hamuro, Japan..... 2m.42.5s.

1948 Joseph Verdeur, United States..... 2m.39.3s.

1952 John Davies, Australia..... 2m.34.4s.

**400-Meter Breast Stroke**

1904 Georg Zacharias, Germany..... 7m.23.6s.

1920 H. Malmroth, Sweden..... 6m.31.8s.

**1,000-Meter Team Race**

1906 Hungary..... 17m.16.2s.

**Springboard Diving**

Points

1904 G. E. Sheldon, United States..... 12 2-3

1906 Gottlob Walz, Germany

1908 Albert Guenther, Germany..... 85.5

1912 Paul Guenther, Germany..... 6

1920 L. E. Kuehn, United States..... 6

1924 A. C. White, United States..... 7

1928 P. Desjardins, United States..... 185.04

1932 Michael Galitzen, United States..... 161.38

1936 Richard Degener, United States..... 163.57

1948 Bruce Harlan, United States..... 163.64

1952 David Browning, United States..... 205.29

**Fancy High Diving**

Points

1912 Eric Adlerz, Sweden..... 7

1920 C. E. Pinkston, United States..... 7

1924 A. C. White, United States..... 9

**Plain High Diving**

Points

1908 H. Johanssen, Sweden..... 83.70

1912 Erik Adlerz, Sweden..... 7

1920 Arvid Wallman, Sweden..... 7

1924 Richard Eve, Australia..... 13½

**Plain and Fancy High Diving**

Points

1928 P. Desjardins, United States..... 98.74

1932 Harold Smith, United States..... 124.80

1936 Marshall Wayne, United States..... 113.58

1948 Samuel Lee, United States..... 130.05

1952 Samuel Lee, United States..... 156.28

**WATER POLO**

1900 Great Britain

1904 United States

1908 Great Britain defeated Belgium

1912 Great Britain defeated Austria

1920 Great Britain defeated Belgium

1924 France defeated Belgium

1928 Germany defeated Hungary

1932 Hungary defeated Germany

1936 Hungary

1948 Italy

1952 Hungary

**SWIMMING—WOMEN****100 Meters**

1920 Ethelda Bleibtrey, United States..... 1m.13.6s.

1922 Fanny Durack, Australia..... 1m.22.2s.

1924 Ethel Lackie, United States..... 1m.12.4s.

1928 Albina Ospowich, United States..... 1m.11s.

1932 Helene Madison, United States..... 1m.6.8s.

1936 Hendrika Mastenbroek, Holland..... 1m.5.9s.

1948 Greta Andersen, Denmark..... 1m.6.3s.

1952 Katalin Szoke, Hungary..... 1m.6.8s.

**300 Meters**

1920 Ethelda Bleibtrey, United States..... 4m.34s.

**400 Meters**

1924 Martha Norelius, United States..... 6m.2.2s.

1928 Martha Norelius, United States..... 5m.42.8s.

1932 Helene Madison, United States..... 5m.28.5s.

1936 Hendrika Mastenbroek, Holland..... 5m.26.4s.

1948 Ann Curtis, United States..... 5m.17.8s.

1952 Valerie Gyenge, Hungary..... 5m.12.1s.

**400-Meter Relay**

1912	Great Britain.....	5m.52.8s.
1920	United States.....	5m.11.6s.
1924	United States.....	4m.58.8s.
1928	United States.....	4m.47.6s.
1932	United States.....	4m.38s.
1936	Holland.....	4m.36s.
1948	United States.....	4m.29.2s.
1952	Hungary.....	4m.24.4s.

**100-Meter Backstroke**

1924	Sybil Bauer, United States.....	1m.23.2s.
1928	Marie Braun, Holland.....	1m.22s.
1932	Eleanor Holm, United States.....	1m.19.4s.
1936	Dina Senff, Holland.....	1m.18.9s.
1948	Karen Harup, Denmark.....	1m.14.4s.
1952	Joan Harrison, South Africa.....	1m.14.3s.

**200-Meter Breast Stroke**

1924	Lucy Morton, Great Britain.....	3m.33.2s.
1928	Hilde Schrader, Germany.....	3m.12.6s.
1932	Clare Dennis, Australia.....	3m.6.3s.
1936	Hideko Maehata, Japan.....	3m.3.6s.
1948	Nel van Vliet, Netherlands.....	2m.57.2s.
1952	Eva Szekely, Hungary.....	2m.51.7s.

**Plain High Diving**

		Points
1912	Greta Johansson, Sweden.....	39.9
1920	Miss Fryland, Denmark.....	6
1924	Caroline Smith, United States.....	9

**Fancy Springboard Diving**

		Points
1920	Aileen Riggan, United States.....	9
1924	Elizabeth Becker, United States.....	8
1928	Helen Meany, United States.....	78.62
1932	Georgia Coleman, United States.....	87.52
1936	Marjorie Gestring, United States.....	89.27
1948	Victoria M. Draves, United States.....	108.74
1952	Mrs. Patricia McCormick, United States.....	147.30

**Plain and Fancy High Diving**

		Points
1928	Elizabeth B. Pinkston, United States.....	31.60
1932	Dorothy Poynton, United States.....	40.26
1936	Mrs. Dorothy Poynton Hill, United States.....	33.93
1948	Victoria M. Draves, United States.....	68.87
1952	Mrs. Patricia McCormick, United States.....	79.37

**BOXING****Flyweight**

1904	George V. Finnegan, United States (105-lb. class)
1920	Frank Genaro, United States
1924	Fidel La Barba, United States
1928	Anton Kocsis, Hungary
1932	Stephen Enekes, Hungary
1936	Willi Kaiser, Germany
1948	Pascual Perez, Argentina
1952	Nate Brooks, United States

**Bantamweight**

1904	O. L. Kirk, United States (115-lb. class)
1908	H. Thomas, Great Britain
1920	Walker, South Africa
1924	W. H. Smith, South Africa
1928	Vittorio Tamagnini, Italy
1932	Horace Gwynne, Canada
1936	Ulderico Sergio, Italy
1948	Tibor Csik, Hungary
1952	Pentti Hamalainen, Finland

**Featherweight**

1904	O. L. Kirk, United States
1908	R. K. Gunn, Great Britain
1920	Fritsch, France
1924	John Fields, United States
1928	L. Van Klaveren, Holland
1932	Carmelo Ambrosio Robledo, Argentina
1936	Oscar Casanovas, Argentina
1948	Ernesto Formenti, Italy
1952	Jan Zachara, Czechoslovakia

**Lightweight**

1904	H. J. Spanger, United States
1908	F. Grace, Great Britain
1920	Samuel Mosberg, United States
1924	Harold Nielsen, Denmark
1928	Carlo Orlandi, Italy
1932	Lawrence Stevens, South Africa
1936	Imre Harangi, Hungary
1948	Gerry Dreyer, South Africa
1952	Aureliano Bolognesi, Italy

**Light Welterweight**

1952	Charles Adkins, United States
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**Welterweight**

1904	Al Young, United States
1920	Schneider, Canada
1924	J. S. Delarge, Belgium
1928	Edward Morgan, New Zealand
1932	Edward Flynn, United States
1936	Sten Suvio, Finland
1948	Julius Torma, Czechoslovakia
1952	Zygmunt Chychla, Poland

**Light Middleweight**

1952	Laszlo Papp, Hungary
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**Middleweight**

1904	Charles Mayer, United States
1908	J. W. H. T. Douglas, Great Britain
1920	H. W. Mallin, Great Britain
1924	H. W. Mallin, Great Britain
1928	Piero Toscani, Italy
1932	Carmen Barth, United States
1936	Jean Despeaux, France
1948	Laszlo Papp, Hungary
1952	Floyd Patterson, United States

**Light Heavyweight**

1920	Edward Eagan, United States
1924	H. J. Mitchell, Great Britain
1928	Victoria Avendano, Argentina
1932	David E. Carstens, South Africa
1936	Roger Michelot, France
1948	George Hunter, South Africa
1952	Norvel Lee, United States

**Heavyweight**

1904	Sam Berger, United States
1908	A. L. Oldham, Great Britain
1920	Rawson, Great Britain
1924	Otto Von Porath, Norway
1928	A. Rodriguez Jurado, Argentina
1932	Santiago A. Lovell, Argentina
1936	Herbert Runge, Germany
1948	Rafael Iglesias, Argentina
1952	Edward Sanders, United States

**POLO**

1900	Great Britain	1924	Argentina
1908	Great Britain	1936	Argentina
1920	Great Britain		



**WRESTLING****CATCH-AS-CATCH-CAN****Flyweight**

- 1904 R. Curry, United States (105-lb. class)  
 1948 V. L. Viitala, Finland  
 1952 Hassen Cemici, Turkey

**Bantamweight**

- 1904 George N. Mehnert, U. S. (115-lb. class)  
 1908 George N. Mehnert, U. S. (115-lb. class)  
 1924 Kustaa Pihlajamaki, Finland  
 1928 K. Mäkinen, Finland  
 1932 Robert Edward Pearce, United States  
 1936 Odon Zombory, Hungary  
 1948 Nassuh Akar, Turkey  
 1952 Shohachi Ishii, Japan

**Featherweight**

- 1896 Karl Schumann, Germany  
 1904 I. Niflot, United States  
 1908 G. S. Dole, United States  
 1920 Charles E. Ackerly, United States  
 1924 Robin Reed, United States  
 1928 Allie Morrison, United States  
 1932 Herman Pihlajamaki, Finland  
 1936 Kustaa Pihlajamaki, Finland  
 1948 Gazanfer Bilge, Turkey  
 1952 Bayram Sit, Turkey

**Lightweight**

- 1904 B. J. Bradshaw, United States  
 1908 G. de Relwyskow, Great Britain  
 1920 Kalle Antilla, Finland  
 1924 Russell Vis, United States  
 1928 O. Kapp, Estonia  
 1932 Charles Pacome, France  
 1936 Karoly Karpati, Hungary  
 1948 Celal Atik, Turkey  
 1952 Olle Anderberg, Sweden

**Welterweight**

- 1904 O. F. Roehm, United States  
 1924 Hermann Gehri, Switzerland  
 1928 A. J. Haavisto, Finland  
 1932 Jack F. Van Bebber, United States  
 1936 Frank Lewis, United States  
 1948 Yasar Dogu, Turkey  
 1952 William Smith, United States

**Middleweight**

- 1904 Charles Erickson, United States  
 1908 S. V. Bacon, Great Britain  
 1920 E. Leino, Finland  
 1924 Fritz Haggmann, Switzerland  
 1928 E. Kyburg, Switzerland  
 1932 Ivar Johansson, Sweden  
 1936 Emile Poilve, France  
 1948 Glenn Brand, United States  
 1952 David Gimakuridze, Russia

**Light Heavyweight**

- 1920 Anders Larsson, Sweden  
 1924 John Spellman, United States  
 1928 T. S. Sjostedt, Sweden  
 1932 Peter Joseph Mehrlinger, United States  
 1936 Knut Fridell, Sweden  
 1948 Henry Wittenberg, United States  
 1952 Wiking Palm, Sweden

**Heavyweight**

- 1904 B. Hansen, United States  
 1908 G. C. O'Kelly, Great Britain  
 1920 Roth, Switzerland

- 1924 Harry Steele, United States  
 1928 Johan C. Richthoff, Sweden  
 1932 Johan C. Richthoff, Sweden  
 1936 Kristjan Palusalu, Estonia  
 1948 George Bobis, Hungary  
 1952 Arsen Mekokishvili, Russia

**ROWING****Eight-Oared Shell**

- 1900 United States..... 6m.7½s.  
 1904 United States  
 1908 Great Britain  
 1912 Great Britain..... 6m.15s.  
 1920 United States..... 6m.2½s.  
 1924 United States..... 6m.33½s.  
 1928 United States..... 6m.3½s.  
 1932 United States..... 6m.37½s.  
 1936 United States..... 6m.25.4s.  
 1948 United States..... 5m.56.7s.  
 1952 United States..... 6m.28.9s.

**Single Sculls**

- 1900 Barrelet, Belgium..... 7m.35½s.  
 1904 Frank B. Greer, United States  
 1908 H. T. Blackstaffe, Great Britain  
 1912 W. D. Kinear, Great Britain..... 7m.47½s.  
 1920 J. B. Kelly, United States..... 7m.35s.  
 1924 Jack Beresford, Jr., Great Britain..... 7m.49½s.  
 1928 Henry Robert Pearce, Australia..... 7m.11s.  
 1932 Henry Robert Pearce, Australia..... 7m.44½s.  
 1936 Gustav Schaffer, Germany..... 8m.21.5s.  
 1948 Mervyn Wood, Australia..... 7m.24.4s.  
 1952 Jurig Tjukalov, Russia..... 8m.12.8s.

**Double Sculls**

- 1904 United States  
 1908 J. R. K. Fenning and G. L. Thomson, Great Britain  
 1920 J. B. Kelly and Paul V. Costello, United States..... 7m.9s.  
 1924 J. B. Kelly and Paul V. Costello, United States..... 6m.34s.  
 1928 Paul V. Costello and Charles J. McIlvaine, United States..... 6m.41½s.  
 1932 Kenneth Myers and W. E. Garrett Gilmore, United States..... 7m.17½s.  
 1936 Jack Beresford and Leslie Southwood, Great Britain..... 7m.20.8s.  
 1948 B. H. Bushnell and R. D. Burnell, Great Britain..... 6m.51.3s.  
 1952 T. Cappelozza and E. Guerrero, Argentina... 7m.32.2s.

**Four-Oared Shell with Coxswain**

- 1900 Germany  
 1906 Italy  
 1912 Germany..... 6m.59½s.  
 1920 Switzerland..... 6m.54s.  
 1924 Switzerland..... 7m.18½s.  
 1928 Italy..... 6m.47½s.  
 1932 Germany..... 7m.19½s.  
 1936 Germany..... 7m.16.2s.  
 1948 United States..... 6m.50.3s.  
 1952 Czechoslovakia..... 7m.33.4s.

**Four-Oared Shell without Coxswain**

- 1904 United States  
 1908 Great Britain  
 1924 Great Britain  
 1928 Great Britain..... 6m.36s.  
 1932 Great Britain..... 6m.58½s.  
 1936 Germany..... 7m.1.8s.  
 1948 Italy..... 6m.39s.  
 1952 Yugoslavia..... 7m.16s.

## Pair-Oared Shell with Coxswain

1900	R. Klein and F. A. Brandt, Holland.....	7m.34 $\frac{1}{2}$ s.
1906	Italy (1,600 Meters)	
1906	Italy (1,000 Meters)	
1920	M. Olgeni and G. Scatturin, Italy.....	7m.56s.
1924	M. Candevau and A. Felber, Switzerland..	8m.39s.
1928	H. W. Schochlin and C. F. Schochlin, Switzerland.....	7m.42 $\frac{1}{2}$ s.
1932	Joseph A. Schauers and Charles M. Kieffer, United States.....	8m.25 $\frac{1}{2}$ s.
1936	Gerhard Gustmann and Herbert Adamski, Germany.....	8m.36.9s.
1948	F. Pedersen and T. Henriksen, Denmark....	8m.0.5s.
1952	R. Salles-G. Mercier, France.....	8m.28.6s.

## Pair-Oared Shell without Coxswain

1904	United States.....	10m.57s.
1908	J. Fenning and G. Thomson, Great Britain..	9m.41s.
1924	W. H. Rosingham and A. C. Beynen, Holland..	8m.19 $\frac{1}{2}$ s.
1928	K. Moeschter and B. Muller, Germany.....	7m.6 $\frac{1}{2}$ s.
1932	Lewis Clive and H. R. Arthur Edwards, Great Britain.....	8m.
1936	Willi Eichhorn and Hugo Strauss, Germany..	8m.16.1s.
1948	J. H. T. Wilson and W. G. R. M. Laurie, Great Britain.....	7m.21.1s.
1952	Charles Logg, Jr., and Thomas Price, United States.....	8m.20.7s.

## BASKETBALL

1904	United States	1948	United States
1936	United States	1952	United States

## Olympic Games Competitors

Year	Site	Entries	Year	Site	Entries
1896	Athens.....	484	1924	Paris.....	3,385
1900	Paris.....	427	1928	Amsterdam..	3,905
1904	St. Louis.....	595	1932	Los Angeles..	1,700
1906	Athens.....	901	1936	Berlin.....	3,959
1908	London.....	2,082	1948	London.....	6,000
1912	Stockholm....	3,282	1952	Helsinki.....	5,781
1920	Antwerp.....	2,741			

## The Olympic Oath

"We swear that we will take part in the Olympic Games in loyal competition, respecting the regulations which govern them and desirous of participating in them in the true spirit of sportsmanship for the honor of our country and for the glory of sport."

## WOMEN'S LACROSSE

## 1954 All-American Selections

**FIRST TEAM**—First home: Margot Cunningham; second home: Mrs. Alice Willets; third home: Judy Devlin; right attack wing: Betty Shellenberger; left attack wing: Betty Richey; center: Lee Chadbourne; right defense wing: Mrs. Clorinda Saragosa; left defense wing: Eugenia Slaymaker; third man: Dorothy Moffett; cover point: Mary Fetter; point: Gayle Meacham; goalies: Roberta Brennan and Gloria Heath.

**RESERVES**—First home: Betty King; second home: Mrs. Helen Allen; third home: Mildred Barnes; right attack wing: Eleanor Keady; left attack wing: Sue Gordy; center: Pat Magee; right defense wing: Mrs. Nancy Chance; left defense wing: June Biedler; third man: Barbara Hall; cover point: Sue Devlin; point: Barbara Henninger; goal: Doris Cholerton.

## HONORABLE MENTION

**Attack**—Gertrude Hooper, Sue Lockwood, Elizabeth Sweet.  
**Defense**—Catherine Christle, Patricia Told.

## SULLIVAN AWARD WINNERS

The James E. Sullivan Memorial Award is given annually to the amateur athlete voted by sports leaders as having done the most to advance the cause of sportsmanship.

Year	Winner	Sport
1930	Robert T. Jones, Jr.....	Golf
1931	Bernard E. Berlinger.....	Track and field
1932	James A. Bausch.....	Track and field
1933	Glenn Cunningham.....	Running
1934	William R. Bonthron.....	Running
1935	W. Lawson Little, Jr.....	Golf
1936	Glenn Morris.....	Track and field
1937	J. Donald Budge.....	Tennis
1938	Donald R. Lash.....	Running
1939	Joseph W. Burk.....	Rowing
1940	J. Gregory Rice.....	Running
1941	Leslie MacMitchell.....	Running
1942	Cornelius Warmerdam.....	Pole vaulting
1943	Gilbert L. Dodds.....	Running
1944	Ann Curtis.....	Swimming
1945	Felix (Doc) Blanchard.....	Football
1946	Y. Arnold Tucker.....	Football
1947	John B. Kelly, Jr.....	Rowing
1948	Robert B. Mathias.....	Track and field
1949	Richard T. Button.....	Figure skating
1950	Fred Wilt.....	Running
1951	Robert E. Richards.....	Track and field
1952	Horace Ashenfelter.....	Running
1953	Major Sammy Lee.....	Diving

## Thorpe 'Greatest' Athlete

In 1950 the Associated Press polled the nation's sports experts on the "greats" in various fields during the past half-century. The list of winners:

Male athlete—Jim Thorpe.  
Female athlete—Mildred D. Zaharias.  
Baseball player—Babe Ruth.  
Football player—Jim Thorpe.  
Fighter—Jack Dempsey.  
Basketball player—George Mikan.  
Track performer—Jesse Owens.  
Golfer—Bobby Jones.  
Tennis player—Bill Tilden.  
Swimmer—Johnny Weissmuller.  
Race horse—Man o' War.

Greatest upset—The Boston Braves' four-straight world series victory over the Philadelphia Athletics in 1914.

Most dramatic event—Dempsey-Firpo heavyweight title fight at the Polo Grounds, New York, Sept. 14, 1923.

## U. S. PRO TENNIS CHAMPIONS

1927-30—Vincent Richards	1941—Fred Perry
1931—William T. Tilden, II	1942—Don Budge
1932—Karel Kozeluh	1943—Bruce Barnes
1933—Vincent Richards	1944—No tournament
1934—Hans Nusslein	1945—Welby Van Horn
1935—William T. Tilden, II	1946-47—Bobby Riggs
1936—Joe Whalen	1948—Jack Kramer
1937—Karel Kozeluh	1949—Bobby Riggs
1938—Fred Perry	1950-51—Francisco Segura
1939—Ellsworth Vines	1952-53—No competition
1940—Don Budge	

## BOXING

**W**HETHER it be called pugilism, prize fighting or boxing, there is no tracing "the Sweet Science" to any definite source. Tales of rivals exchanging blows for fun, fame or money go back to earliest recorded history and classical legend. There was a mixture of boxing and wrestling called the "pancratium" in the ancient Olympic Games and in such contests the rivals belabored one another with hands fortified with heavy leather wrappings that were sometimes studded with metal. More than one Olympic competitor lost his life at this brutal exercise.

There was little law or order in pugilism until Jack Broughton, one of the early champions of England, drew up a set of rules for the game in 1743. Broughton, called "the father of English boxing," also is credited with having invented boxing gloves. However, these gloves—or "mufflers" as they were called—were used only in teaching "the manly art of self-defense" or in training bouts. All professional

championship fights were contested with "bare knuckles" until 1892 when John L. Sullivan lost the heavyweight championship of the world to James J. Corbett in New Orleans in a bout in which both contestants wore regulation gloves.

The Broughton rules were superseded by the London Prize Ring Rules of 1838. The 8th Marquess of Queensberry, with the help of John G. Chambers, put forward the "Queensberry Rules" in 1866, a code that called for gloved contests. Amateurs took quickly to the Queensberry Rules, the professionals slowly.

There is no official international set of rules for boxing even today. Amateur organizations set rules for amateurs in different countries and professional rules set by boxing commissions vary even in different sections of the United States, but the variations are for the most part minor. A prize fighter doesn't have to change his style greatly to ply his trade anywhere in the world.

## Boxing Statistics

Source: Nat Fleischer's *All-Time Ring Record Book*, published and copyrighted by The Ring Book Shop, Inc., Madison Square Garden, New York, N. Y.

## Boxing's Biggest Gates

WF—Won on foul.		ND—No decision.		(1st)—First bout.	(2d)—Second bout.	(3d)—Third bout.
Date	Winner, weight	Losers, weight	Rounds	Site	Receipts	Attendance
Sept. 22, 1927	Tunney (189½)-Dempsey (192½) (2d)...		10	Soldier Field, Chicago.....	\$2,658,660	104,943
June 19, 1946	Louis (207)-Conn (187) (2d).....		KO 8	Yankee Stadium, New York.....	1,925,564	45,266
Sept. 23, 1926	Tunney (189½)-Dempsey (190) (1st)....		10	Sesquicentennial Stdm., Phila....	1,895,733	120,757
July 2, 1921	Dempsey (188)-Carpentier (172).....		KO 4	Boyle's 30 Acres, Jersey City....	1,789,238	80,000
Sept. 14, 1923	Dempsey (192½)-Firpo (216½).....		KO 2	Polo Grounds, New York.....	1,188,603*	82,000
July 21, 1927	Dempsey (194½)-Sharkey (196).....		KO 7	Yankee Stadium, New York.....	1,083,530*	75,000
June 22, 1938	Louis (198½)-Schmeling (193) (2d)....		KO 1	Yankee Stadium, New York.....	1,015,012*	70,000
Sept. 24, 1935	Louis (199½)-Max Baer (210½).....		KO 4	Yankee Stadium, New York.....	1,000,832*	88,150
June 25, 1948	Louis (213½)-Walcott (194½) (2d)....		KO 11	Yankee Stadium, New York.....	841,739	42,667
Sept. 12, 1951	Robinson (157½)-Turpin (159) (2d)....		KO 10	Polo Grounds, New York.....	767,626	61,370
June 12, 1930	Schmeling (188)-Sharkey (197) (1st)....		WF 4	Yankee Stadium, New York.....	749,935	79,222
June 22, 1937	Louis (197½)-Braddock (197).....		KO 8	Comiskey Park, Chicago.....	715,470	45,500
July 26, 1928	Tunney (192)-Heeney (203½).....		KO 11	Yankee Stadium, New York.....	691,014	45,890
Sept. 29, 1941	Louis (202½)-Nova (202½).....		KO 6	Polo Grounds, New York.....	583,711	56,549
June 19, 1936	Schmeling (192)-Louis (198) (1st)....		KO 12	Yankee Stadium, New York.....	547,541	42,088
June 17, 1954	Marciano (187½)-Charles (185½).....		15	Yankee Stadium, New York.....	543,092	47,585
Sept. 11, 1924	Wills (217)-Firpo (224½).....		12	Boyle's 30 Acres, Jersey City....	509,135	70,000
Sept. 23, 1952	Marciano (184)-Walcott (196).....		KO 13	Municipal Stdm., Phila.....	504,645	40,379
July 16, 1926	Delaney (166½)-Berlenbach (174½) (3d)		15	Ebbets Field, Brooklyn.....	461,789	49,186
July 23, 1923	Leonard (134)-Tendler (133½) (2d)....		15	Yankee Stadium, New York.....	452,648	58,519
July 4, 1919	Dempsey (187)-Willard (245).....		KO 3	Toledo, Ohio.....	452,224	19,650
June 18, 1941	Louis (199½)-Conn (174) (1st).....		KO 13	Polo Grounds, New York.....	451,743	60,071
Sept. 24, 1953	Marciano (185)-LaStarza (184½).....		KO 11	Polo Grounds, New York.....	435,818	44,562
June 21, 1932	Sharkey (205)-Schmeling (188) (2d)....		15	Long Island City Bowl, N. Y.....	432,365	61,863
June 14, 1934	Max Baer (209½)-Carnera (263½).....		KO 11	Long Island City Bowl, N. Y.....	428,000	56,000
July 16, 1947	Graziano (154½)-Zale (159) (2d).....		KO 6	Chicago Stadium.....	422,918	18,547
June 25, 1952	Maxim (173)-Robinson (157½).....		KO 14	Yankee Stadium, New York.....	421,698	47,983
Feb. 27, 1929	Sharkey (192)-Stribling (182).....		10	Flamingo Park, Miami Beach, Fla..	405,000	40,000
July 12, 1923	Firpo (214)-Willard (242).....		KO 8	Boyle's 30 Acres, Jersey City....	390,837	80,000
May 12, 1923	Firpo (212)-McAuliffe (200).....		KO 3	Yankee Stadium, New York.....	385,040	31,000
	Willard (245)-Floyd Johnson (195).....		KO 11			
June 27, 1929	Schmeling (187)-Uzcudun (192½) (1st).		15	Yankee Stadium, New York.....	378,902	65,000
July 27, 1922	Leonard (134½)-Tendler (134½) (1st).		ND 12	Boyle's 30 Acres, Jersey City....	367,862	54,685
July 3, 1931	Schmeling (189)-Stribling (186½).....		KO 15	Cleveland Stadium.....	349,415	37,396
Sept. 20, 1939	Louis (200)-Pastor (183) (2d).....		KO 11	Briggs Stadium, Detroit.....	347,870	33,868

\* Includes income from other sources, such as motion pictures or radio, or both.



## HISTORY OF WORLD HEAVYWEIGHT CHAMPIONSHIP FIGHTS

(Bouts in which title changed hands)

Date	Where held	Winner, weight, age	Loser, weight, age	Rounds	Referee
July 8, 1889	Richburg, Miss.	John L. Sullivan, 198 (30)...	Jake Kilrain, 195 (30)....	75	John Fitzpatrick
(Last bare-knuckle title fight)					
Sept. 7, 1892	New Orleans, La.	James J. Corbett, 178 (26)...	John L. Sullivan, 212 (33)...	21	Prof. John Duffy
March 17, 1897	Carson City, Nev.	Bob Fitzsimmons, 167 (34)...	James J. Corbett, 183 (30)...	KO 14	George Siler
June 9, 1899	Coney Island, N. Y.	*James J. Jeffries, 206 (24)...	Bob Fitzsimmons, 167 (37)...	KO 11	George Siler
Feb. 23, 1906	Los Angeles	†Tommy Burns, 180 (24)...	Marvin Hart, 188 (29)....	20	James J. Jeffries
Dec. 26, 1908	Sydney, N. S. W.	Jack Johnson, 196 (30)...	Tommy Burns, 176 (27)...	KO 14	Hugh McIntosh
July 4, 1910	Reno, Nev.	Jack Johnson, 208 (31)...	James J. Jeffries, 227 (34)...	KO 15	Tex Rickard
(Jeffries came out of retirement in an effort to regain title)					
April 5, 1915	Havana, Cuba	Jess Willard, 230 (31)....	Jack Johnson, 205½ (37)...	KO 26	Jack Welch
July 4, 1919	Toledo, Ohio	Jack Dempsey, 187 (24)....	Jess Willard, 245 (35)....	KO 3	Ollie Pecord
Sept. 23, 1926	Philadelphia	†Gene Tunney, 189½ (28)...	Jack Dempsey, 190 (31)...	10	Pop Reilly
June 12, 1930	New York	Max Schmeling, 188 (24)...	Jack Sharkey, 197 (27)...	WF 4	Jim Crowley
June 21, 1932	Long Island City	Jack Sharkey, 205 (29)....	Max Schmeling, 188 (26)...	15	Gunboat Smith
June 29, 1933	Long Island City	Primo Carnera, 260½ (26)...	Jack Sharkey, 201 (30)....	KO 6	Arthur Donovan
June 14, 1934	Long Island City	Max Baer, 209½ (25)....	Primo Carnera, 263¼ (27)...	KO 11	Arthur Donovan
June 13, 1935	Long Island City	Jim Braddock, 193¾ (29)...	Max Baer, 209½ (26)....	15	Jack McAvoy
June 22, 1937	Chicago	Joe Louis, 197¼ (23)....	Jim Braddock, 197 (31)...	KO 8	Tommy Thomas
June 22, 1949	Chicago	(a)Ezzard Charles, 181¼ (27)...	Joe Walcott, 195½ (35)....	15	Davey Miller
Sept. 27, 1950	New York	(b)Ezzard Charles, 184¼ (29)...	Joe Louis, 218 (36)....	15	Mark Conn
July 18, 1951	Pittsburgh	Joe Walcott, 194 (37)....	Ezzard Charles, 182 (30)...	KO 7	Buck McTiernan
Sept. 23, 1952	Philadelphia	Rocky Marciano, 184 (28)...	Joe Walcott, 196 (38)....	KO 13	Charley Daggert

\* Lack of opposition caused Jeffries to retire in March 1905. He named Marvin Hart and Jack Root as the leading contenders and agreed to referee their fight at Reno, Nev., on July 3, 1905, with the stipulation that he would designate the winner the world champion. Hart, 190 (28), knocked out Root, 171 (29), in the twelfth round. † Burns claimed the title after defeating Hart. Philadelphia Jack O'Brien became another claimant after fighting a 20-round draw with Burns at Los Angeles on Nov. 28, 1906, with Jeffries as the referee. Burns, 180 (25), eliminated O'Brien, 167 (29), by defeating him in 20 rounds at Los Angeles, May 8, 1907. Charles Eytan was the referee. ‡ Tunney retired after his bout with Tom Heeney in New York on July 26, 1928. Tunney, 192 (30), knocked out Heeney, 203 (30½), in the eleventh round. Ed Forbes was the referee.

(a) Recognized by the National Boxing Association because Louis had announced his retirement on March 1, 1949. (b) Charles gained undisputed possession of the title by beating Louis, who came out of retirement in an effort to regain the crown.

## BARE-KNUCKLE HEAVYWEIGHT CHAMPIONS, 1719-1892

- 1719—Jim Figg
- 1734—George Taylor
- 1740—Jack Broughton
- 1750—Jack Slack
- 1760—Bill Stevens
- 1761—George Meggs
- 1765—Bill Darts
- 1777—Harry Sellers
- 1780—Jack Harris
- 1785—Tom (Jackling) Johnson
- 1790—Big Ben Brain
- 1792—Daniel Mendoza
- 1795—John Jackson (retired)
- 1802—Jem Belcher
- 1805—Henry Pearce (Game Chicken)
- 1808—John Gully (declined title)
- 1809—Tom Cribb received belt, not transferable, and cup.
- 1824—Tom Spring received four cups; resigned title.
- 1825—Jem Ward received belt, not transferable.
- 1838—James (Deaf) Burke claimed title.
- 1839—William Thompson (Bendigo) beat Burke; claimed championship; received belt from Jem Ward.
- 1841—Nick Ward (Jem's brother) beat Ben Caunt, Feb. 2. In return match Caunt beat Nick Ward and received belt by subscription. It was transferable.
- 1845—Thompson beat Caunt and got belt.
- 1850—Bill Perry (The Tipton Slasher), after fight with Paddock, claimed title.
- 1851—Harry Broome won title from Perry.
- 1853—Perry claimed title when Broome forfeited £200 to him in a match; retired from ring on Aug. 13.
- 1857—Tom Sayers beat Perry for £200 a side and new belt.
- 1860—Sayers retired after 42-round draw with John C. Heenan (The Benicia Boy), leaving old belt open for competition.
- 1860—Sam Hurst (The Stalybridge Infant) beat Paddock and received belt.
- 1861—Jem Mace beat Hurst.
- 1862—Mace beat Tom King for £200 a side and the belt.
- 1862—King beat Mace and claimed belt. Subsequently gave it up. Declined to meet Mace again. Mace claimed belt.
- 1863—King beat Heenan for £1,000 a side.
- 1865—Joe Wormald beat Andrew Marsden for £200 a side and belt, which had been claimed by both. Belt was given to Wormald, who forfeited £120 to Mace.
- 1866—Mace and Joe Goss fought draw with £200 a side and belt at stake.
- 1867—Wormald received £200 forfeit from Ned O'Baldwin and claimed belt when O'Baldwin failed to appear at starting place.
- 1867—Mace and O'Baldwin drew; £200 a side; title and belt in abeyance.
- 1868—Wormald and O'Baldwin drew; £200 a side and title in America.
- 1869—Mike McCoole beat Tom Allen in America for world championship.
- 1870—Mace beat Allen in America for world championship.
- 1871—Mace and Joe Coburn fought draw for championship; £500 a side.
- 1882—John L. Sullivan defeated Paddy Ryan for American championship only; 9 rounds, Mississippi City, Miss. (London Prize Ring rules).
- 1885—Jem Smith beat Jack Davis for £100 a side and championship of England.
- 1887—Jake Kilrain and Jem Smith drew; \$10,000 and Police Gazette Championship of World belt.
- 1889—John L. Sullivan beat Jake Kilrain, 75 rounds, Richburg, Miss., July 8, in last bare-knuckle championship fight; \$10,000 a side and Police Gazette Belt. (Sullivan claimed world title because of draw fought by Kilrain with Smith, England's titleholder.)

## Other World Boxing Titleholders

## LIGHT HEAVYWEIGHT CHAMPIONS

- 1903 —Jack Root, George Gardner  
 1903-05—Bob Fitzsimmons  
 1905-12—Philadelphia Jack O'Brien  
 1912-16—Jack Dillon  
 1916-20—Battling Levinsky  
 1920-22—Georges Carpentier  
 1923 —Battling Siki  
 1923-25—Mike McTigue  
 1925-26—Paul Berlenbach  
 1926-27—Jack Delaney (a)  
 1927 —Mike McTigue  
 1927-29—Tommy Loughran (a)  
 1930-34—Maxie Rosenbloom  
 1934-35—Bob Olin  
 1935-39—John Henry Lewis (a)  
 1939 —Melio Bettina  
 1939-41—Billy Conn (a)  
 1941-48—Gus Lesnevich  
 1948-50—Freddie Mills  
 1950-53—Joey Maxim  
 1953 —Archie Moore

(a) Abandoned title.

## MIDDLEWEIGHT CHAMPIONS

- 1867-72—Tom Chandler (bare knuckles).  
 1872-81—Geo. Rourke (bare knuckles and gloves)  
 1881-82—Mike Donovan (r)  
 1884-91—Jack (Nonpareil) Dempsey  
 1891-97—Bob Fitzsimmons  
 1897-1907—Tommy Ryan, Kid McCoy, Philadelphia Jack O'Brien (t)

- 1907-08—Stanley Ketchel  
 1908 —Billy Papke  
 1908-10—Stanley Ketchel  
 1910-13—Billy Papke  
 1913 —Frank Klaus  
 1913-14—George Chip  
 1914-17—Al McCoy  
 1917-20—Mike O'Dowd  
 1920-23—Johnny Wilson  
 1923-26—Harry Greb  
 1926 —Tiger Flowers  
 1926-31—Mickey Walker (a)  
 1931-32—Gorilla Jones (NBA); Ben Jeby (N. Y. Comm.)  
 1932-37—Marcel Thil\*  
 1938 —Al Hostak and Solly Krieger (NBA)  
 1939 —Solly Krieger, Al Hostak (NBA); Ceferino Garcia (N. Y. Comm.)  
 1940 —Tony Zale (NBA); Ken Overlin (N. Y. Comm.)  
 1941 —Tony Zale (NBA); Billy Soose (N. Y. Comm.)†  
 1941-47—Tony Zale  
 1947-48—Rocky Graziano  
 1948 —Tony Zale  
 1948-49—Marcel Cerdan  
 1949-51—Jake La Motta  
 1951 —Ray Robinson, Randy Turpin  
 1951-52—Ray Robinson (r)  
 1953 —Carl Olson

(\*) Retired. (t) Title claimants. (a) Abandoned title. \* Thil's victory on a foul over Jones gave him a clear title claim, but the New York Commission withheld recognition. At various times during the 1932-37 period, championship recognition by the different bodies was given to the following: Ben Jeby, Lou Brouillard, Vince Dundee, Teddy Yarosz, Babe Risko, and Freddy Steele. Fred Apostoli knocked out Thil in 10 rounds at the Polo Grounds, Sept. 23, 1937, but did not claim the title because of an agreement made with Thil. This was Thil's last fight. † Soose abandoned his claim to the title and Zale became the undisputed champion by defeating Georgie Abrams, who had beaten Soose three times.

## WELTERWEIGHT CHAMPIONS

- 1892-94—Mysterious Billy Smith  
 1894-96—Tommy Ryan

- 1896 —Kid McCoy (o)  
 1900 —Rube Ferns, Matty Matthews  
 1901 —Rube Ferns  
 1901-06—Joe Walcott\*  
 1906-07—Honey Melody  
 1907 —Mike (Twin) Sullivan†  
 1915 —Ted Lewis†  
 1919-22—Jack Britton  
 1922-26—Mickey Walker  
 1926-27—Pete Latzo  
 1927-29—Joe Dundee  
 1929-30—Jackie Fields  
 1930 —Young Jack Thompson  
 1930-31—Tommy Freeman  
 1931 —Young Jack Thompson  
 1931-32—Lou Brouillard  
 1932-33—Jackie Fields  
 1933 —Young Corbett 3d  
 1933-34—Jimmy McLarnin  
 1934 —Barney Ross  
 1934-35—Jimmy McLarnin  
 1935-38—Barney Ross  
 1938-40—Henry Armstrong  
 1940-41—Fritzie Zivic  
 1941-46—Freddie Cochrane  
 1946-47—Marty Servo (r)  
 1947-51—Ray Robinson (a)  
 1951 —Johnny Bratton (NBA)  
 1951 —Kid Gavilan

(o) Outgrow class. \* Walcott lost on foul to Dixie Kid in 1904, but decision was disputed. Dixie Kid went abroad, outgrow class, and Walcott was again recognized as the champion. † Sullivan outgrow class. The title was claimed by Jimmy Gardner, Jimmy Clabby, Ray Bronson, Clarence (Kid) Ferns, Mike Gibbons, Kid Graves, Mike Glover, Ted Lewis, and Jack Britton but no one received recognition as titleholder until Ted Lewis established his claim in 1915. ‡ Lewis outpointed Britton to gain undisputed possession of the crown on Aug. 31, 1915, and fought Britton a number of times over a period of four years with varying results until March 17, 1919, when Britton became the undisputed titleholder by knocking out Lewis. (r) Retired. (a) Abandoned title.

## LIGHTWEIGHT CHAMPIONS

- 1885-96—Jack McAuliffe\*  
 1896-99—Kid Lavigne  
 1899-02—Frank Erne  
 1902-08—Joe Gans  
 1908-10—Battling Nelson  
 1910-12—Ad Wolgast  
 1912-14—Willie Ritchie  
 1914-17—Freddie Welsh  
 1917-25—Benny Leonard (r)  
 1925 —Jimmy Goodrich  
 1925-26—Rocky Kansas  
 1926-30—Sammy Mandell  
 1930 —Al Singer  
 1930-33—Tony Canzoneri  
 1933-35—Barney Ross  
 1935-36—Tony Canzoneri  
 1936-38—Lou Ambers  
 1938-39—Henry Armstrong  
 1939-40—Lou Ambers  
 1940-41—Lew Jenkins  
 1941-42—Sammy Angott†  
 1943 —Beau Jack, Bob Montgomery (N. Y. Comm.), Sammy Angott (NBA).  
 1944 —Beau Jack, Bob Montgomery (N. Y. Comm.), Sammy Angott, Juan Zurita (NBA).  
 1945 —Bob Montgomery (N. Y. Comm.), Juan Zurita, Ike Williams (NBA).  
 1946-47—Bob Montgomery (N. Y. Comm.), Ike Williams (NBA).  
 1947-51—Ike Williams  
 1951-52—James Carter  
 1952 —Lauro Salas, James Carter  
 1953-54—James Catter  
 1954 —Paddy DeMarco

\* McAuliffe was champion of America, but never held the world crown, his battle for the world title with Jem Carney of England in 1887 resulting in a 74-round draw. (r) Retired. † Angott announced his retirement on Nov. 13, 1942, leaving the title vacant, but approximately two months later announced his comeback as challenger for the crown.

## FEATHERWEIGHT CHAMPIONS

- 1889 —Freddy Bogan  
 1890 —Billy Murphy  
 1892-1900—George Dixon  
 1900-01—Terry McGovern  
 1901 —Young Corbett (o)  
 1904-08—Brooklyn Tommy Sullivan  
 1908-12—Abe Attell  
 1912-23—Johnny Kilbane  
 1923 —Eugene Ciriui  
 1923-25—Johnny Dundee (o)  
 1925-27—Louis (Kid) Kaplan (o)  
 1927-28—Benny Bass  
 1928 —Tony Canzoneri  
 1928-29—Andre Routis  
 1929-32—Battling Battalino (o)  
 1932 —Tommy Paul (NBA); Kid Chocolate (N. Y. Comm.).  
 1933-36—Freddie Miller  
 1936-37—Petey Sarron  
 1937-38—Henry Armstrong (a)  
 1938-40—Joey Archibald  
 1940-41—Harry Jeffra, Joey Archibald  
 1941-42—Chalky Wright  
 1942-48—Willie Pep  
 1948-49—Sandy Saddler  
 1949-50—Willie Pep  
 1950 —Sandy Saddler  
 (o)Outgrew class. (a)Abandoned title.

## BANTAMWEIGHT CHAMPIONS

- 1890-92—George Dixon (o)  
 1894-99—Jimmy Barry (r)  
 1899-1900—Terry McGovern (o)  
 1901 —Harry Harris (o)  
 1902-03—Harry Forbes  
 1903-04—Frankie Neil  
 1904 —Joe Bowker (o)  
 1905-07—Jimmy Walsh (o)  
 1910-14—Johnny Coulon  
 1914-17—Kid Williams  
 1917-20—Pete Herman  
 1920-21—Joe Lynch  
 1921 —Pete Herman  
 1921-22—Johnny Buff  
 1922-24—Joe Lynch  
 1924 —Abe Goldstein  
 1924-25—Eddie (Cannonball) Martin  
 1925 —Charlie (Phil) Rosenberg (d)  
 1929-35—Al Brown  
 1935-36—Baltazar Sangchili  
 1936 —Tony Marino  
 1936-37—Sixto Escobar  
 1937-38—Harry Jeffra  
 1938-40—Sixto Escobar (r)  
 1940-42—Lou Salica  
 1942-47—Manuel Ortiz  
 1947 —Harold Dade  
 1947-50—Manuel Ortiz

- 1950-52—Vic Toewel  
 1952-54—Jimmy Carruthers (r)

(o)Outgrew class. (r)Retired. (d)Deprived of title when unable to make weight for championship bout.

## FLYWEIGHT CHAMPIONS

- 1916-23—Jimmy Wilde  
 1923-25—Pancho Villa\*  
 1925 —Frankie Genaro  
 1925-27—Fidel La Barba (r)  
 1927 —Corporal Izzy Schwartz†  
 1930 —Midget Wolgast (N. Y. Comm.); Frankie Genaro (NBA).  
 1931-32—Young Perez‡  
 1932-35—Jackie Brown  
 1935-38—Benny Lynch (r)  
 1939 —Peter Kane (a)  
 1943-47—Jackie Paterson (d)  
 1947-50—Rinty Monaghan (r)  
 1950 —Terry Allen  
 1950-52—Dado Marino  
 1952 —Yoshio Shirai

\* Villa died in 1925, Genaro claiming title. † Schwartz was recognized as champion by N. Y. Comm., but conditions in the class became confused and were not straightened out until an elimination tourney was held in November, 1929. ‡ Perez was recognized as world's champion by the International Boxing Union of Europe. (r)Retired. (a)Abandoned title. (d)Deprived of title.

## Famous Firsts in Boxing

First modern ring champion: Jim Figg of England, 1719.

First set of boxing rules and first set of boxing gloves: Made by Jack Broughton, 1743.

First championship fight in America: Jacob Hyer beat Tom Beasley, 1816.

First glove fight: Between two English boxers, at Aix-la-Chapelle, France, October 8, 1818.

First contest in which motion pictures were filmed for general display to the public: Bob Fitzsimmons vs. Jim Corbett bout at Carson City, Nevada, 1897.

First million-dollar gate: Jack Dempsey vs. Georges Carpentier at Boyle's Thirty Acres, Jersey City, N. J., July 2, 1921 (\$1,789,238).

First round-by-round fight broadcast: Dempsey vs. Carpentier, 1921, J. Andrew White announcer.

First fight to draw over 100,000 people: Jack Dempsey vs. Gene Tunney at Philadelphia, 1926 (120,757).

First fight on television (publicly screened): Eric Boon vs. Arthur Danahar, Harringay Arena, London, England, February 23, 1939.

## Neil Memorial Award Winners

The Edward J. Neil Memorial Plaque is given annually by the Boxing Writers' Association of New York to the individual who has done the most to further the cause of the sport. The winners:

- |   |                     |
|---|---------------------|
| 1938 Jack Dempsey                       | 1946 Tony Zale      |
| 1939 Billy Conn                         | 1947 Gus Lesnevich  |
| 1940 Henry Armstrong                    | 1948 Ike Williams   |
| 1941 Joe Louis                          | 1949 Ezzard Charles |
| 1942 Sgt. Barney Ross                   | 1950 Ray Robinson   |
| 1943 All U. S. boxers in service        | 1951 Joe Walcott    |
| 1944 Lt. Comdr. Benny Leonard, U.S.M.S. | 1952 Rocky Marciano |
| 1945 James J. Walker                    | 1953 Kid Gavilan    |



## Joe Louis' Title Fights

1937		Sept. 29	Lou Nova, Polo Grounds.....	KO 6
June 22	James J. Braddock, Chicago.....			KO 8
(Won heavyweight championship of the world)				
Aug. 30	Tommy Farr, Yankee Stadium.....			W 15
1938		1942		
Feb. 23	Nathan Mann, Madison Square Garden....	Jan. 9	Buddy Baer, Madison Square Garden.....	KO 1
Apr. 1	Harry Thomas, Chicago.....	Mar. 27	Abe Simon, Madison Square Garden.....	KO 6
June 22	Max Schmeling, Yankee Stadium.....			
1939		1946		
Jan. 25	John Henry Lewis, Madison Sq. Garden....	June 19	Billy Conn, Yankee Stadium.....	KO 8
Apr. 17	Jack Roper, Los Angeles.....	Sept. 18	Tami Mauriello, Yankee Stadium.....	KO 1
June 28	Tony Galento, Yankee Stadium.....			
Sept. 20	Bob Pastor, Detroit.....			
1940		1947		
Feb. 9	Arturo Godoy, Madison Square Garden....	Dec. 5	Joe Walcott, Madison Square Garden.....	W 15
Mar. 29	Johnny Paychek, Madison Square Garden..			
June 20	Arturo Godoy, Yankee Stadium.....			
Dec. 16	Al McCoy, Boston.....			
1941		1948		
Jan. 31	Red Burman, Madison Square Garden....	June 25	Joe Walcott, Yankee Stadium.....	KO 11
Feb. 17	Gus Dorazio, Philadelphia.....			
Mar. 21	Abe Simon, Detroit.....			
Apr. 8	Tony Musto, St. Louis.....			
May 23	Buddy Baer, Washington, D. C.....			
June 18	Billy Conn, Polo Grounds.....			
		1950		
		Sept. 27	Ezzard Charles, Yankee Stadium.....	L 15

## PROFESSIONAL WEIGHT LIMITS

	lbs.
Flyweight .....	112
Bantamweight .....	118
Featherweight .....	126
Lightweight .....	135
Welterweight .....	147
Middleweight .....	160
Light heavyweight .....	175
Heavyweight .....	over 175

## BADMINTON

Source: John E. Garrod, American Badminton Association.

## United States Champions

## Men's Singles

## Year

## Men's Doubles

Walter R. Kramer, Detroit, Mich....	1937..	Chester Goss—Donald Eversoll, Los Angeles, Calif.
Walter R. Kramer, Detroit, Mich....	1938..	Hamilton Law—Richard Yeager, Seattle, Wash.
David G. Freeman, Pasadena, Calif....	1939..	Hamilton Law—Richard Yeager, Seattle, Wash.
David G. Freeman, Pasadena, Calif....	1940..	Chester Goss—David G. Freeman, Pasadena, Calif.
David G. Freeman, Pasadena, Calif....	1941..	Chester Goss—David G. Freeman, Pasadena, Calif.
David G. Freeman, Pasadena, Calif....	1942..	Chester Goss—David G. Freeman, Pasadena, Calif.
David G. Freeman, Pasadena, Calif....	1947..	D. G. Freeman—Webster Kimball, Pasadena, Calif.
David G. Freeman, Pasadena, Calif....	1948..	Wynn Rogers, Arcadia, Calif.—D. G. Freeman
Marten Mendez, San Diego, Calif....	1949..	Barney McCay, Pasadena—Wynn Rogers, Arcadia
Marten Mendez, San Diego, Calif....	1950..	Barney McCay, Pasadena—Wynn Rogers, Arcadia
Joseph Alston, San Diego, Calif....	1951..	Wynn Rogers, Arcadia—Joseph Alston
Marten Mendez, San Diego, Calif....	1952..	Joseph Alston, Fargo, N. D.—Wynn Rogers
David G. Freeman, Pasadena, Calif....	1953..	Joseph Alston, Detroit—Wynn Rogers

## Women's Singles

## Women's Doubles

Mrs. Del Barkhuff, Seattle, Wash....	1937..	Mrs. Del Barkhuff—Zoe G. Smith, Seattle, Wash.
Mrs. Del Barkhuff, Seattle, Wash....	1938..	Mrs. Roy C. Bergman—Helen Gibson, Westport, Conn.
Mary E. Whittemore, Boston, Mass....	1939..	Mrs. Del Barkhuff—Zoe G. Smith, Seattle, Wash.
Evelyn Boldrick, San Diego, Calif....	1940..	Elizabeth Anselm—Helen Zabriskie, Oakland, Calif.
Thelma Kingsbury, Oakland, Calif....	1941..	Thelma Kingsbury—Janet Wright, Oakland, Calif.
Evelyn Boldrick, San Diego, Calif....	1942..	Evelyn Boldrick, San Diego—Janet Wright, Oakland, Calif.
Ethel Marshall, Buffalo, N. Y.....	1947..	Thelma K. Scovil—Janet Wright, San Francisco
Ethel Marshall, Buffalo, N. Y.....	1948..	Thelma K. Scovil—Janet Wright, San Francisco
Ethel Marshall, Buffalo, N. Y.....	1949..	Thelma K. Scovil—Janet Wright, San Francisco
Ethel Marshall, Buffalo, N. Y.....	1950..	Thelma K. Scovil—Janet Wright, San Francisco
Ethel Marshall, Buffalo, N. Y.....	1951..	Dottie Hann, Manhattan Beach, Calif.—Mrs. L. M. Smith
Ethel Marshall, Buffalo, N. Y.....	1952..	Ethel Marshall—Beatrice Massman, Buffalo, N. Y.
Ethel Marshall, Buffalo, N. Y.....	1953..	Judy Devlin—Susan Devlin, Baltimore

Herb McKenley of Jamaica, B. W. I., finished first in three of the four events on the program to win the world professional sprint championship at Melbourne,

Australia, in 1954. McKenley's victories came in the 100, 130 and 220-yard dashes. Keith Alston of Australia took the other contest, a 75-yard race.

## FOOTBALL

THE PASTIME of kicking a ball around goes back beyond the limits of recorded history. Ancient savage tribes played football of a primitive kind. There was a ball-kicking game played by Athenians and Spartans and Corinthians 2500 years ago and the Greeks had a name for it: *Episkuros*. The Romans had a somewhat similar game called *Harpastum* and are supposed to have carried the game with them when they invaded the British Isles in the First Century, B.C.

Undoubtedly the game known in the United States as Football traces directly to the English game of Rugby, though the modifications have been many and rather sweeping in some directions. There was informal football on our college lawns well over a century ago and an annual Freshman-Sophomore series of "scrimmages" began at Yale in 1840. But the first formal intercollegiate football game in this country was the Princeton-Rutgers contest played at New Brunswick, N. J., on Nov. 6, 1869, with Rutgers winning by 6 goals to 4. Columbia took to the intercollegiate football field in 1870 and Yale in 1872. Soon many colleges were playing football in the autumn.

In those old days games were played with twenty-five, twenty, fifteen or eleven

men on a side by mutual agreement. In 1880 there was a football convention at which Walter Camp of Yale persuaded the delegates to agree to a rule calling for eleven players on a side. In 1882 there was adopted the rule requiring the offensive team to make 5 yards in three downs or surrender the ball to its opponents. The game grew so rough that it was attacked as brutal by many critics and some colleges abandoned the sport. Conditions were so bad in 1906 that President Theodore Roosevelt, an enthusiast for all sports, called a meeting of Yale, Harvard and Princeton representatives at the White House in the hope of reforming and improving the game. The outcome was that the game, with the forward pass introduced and some other modifications of the rules inserted, became faster and cleaner and gradually grew to the tremendous popularity it enjoys today.

Professional football, now firmly established, is an outgrowth of intercollegiate football. The first professional game was played in 1895 at Latrobe, Pa. The National Football League was founded in 1921. The All-America Conference went into action in 1948. At the end of the 1949 season the two major play-for-pay circuits merged, retaining the name of the older league.

## RECORD OF ANNUAL POSTSEASON GAMES

*Source: Official N.C.A.A. Football Guide*

### Rose Bowl (Pasadena, Calif.)

1902	Michigan 49, Stanford 0	1935	Alabama 29, Stanford 13
1916	Washington State 14, Brown 0	1936	Stanford 7, Southern Methodist 0
1917	Oregon 14, Pennsylvania 0	1937	Pittsburgh 21, Washington 0
1918	Mare Island Marines 19, Camp Lewis 7	1938	California 13, Alabama 0
1919	Great Lakes 17, Mare Island Marines 0	1939	Southern California 7, Duke 3
1920	Harvard 7, Oregon 6	1940	Southern California 14, Tennessee 0
1921	California 28, Ohio State 0	1941	Stanford 21, Nebraska 13
1922	Washington & Jefferson 0, California 0	1942	Oregon State 20, Duke 16*
1923	Southern California 14, Penn State 3	1943	Georgia 9, U. C. L. A. 0
1924	Navy 14, Washington 14	1944	Southern California 29, Washington 0
1925	Notre Dame 27, Stanford 10	1945	Southern California 25, Tennessee 0
1926	Alabama 20, Washington 19	1946	Alabama 34, Southern California 14
1927	Alabama 7, Stanford 7	1947	Illinois 45, U. C. L. A. 14
1928	Stanford 7, Pittsburgh 6	1948	Michigan 49, Southern California 0
1929	Georgia Tech 8, California 7	1949	Northwestern 20, California 14
1930	Southern California 47, Pittsburgh 14	1950	Ohio State 17, California 14
1931	Alabama 24, Washington State 0	1951	Michigan 14, California 6
1932	Southern California 21, Tulane 12	1952	Illinois 40, Stanford 7
1933	Southern California 35, Pittsburgh 0	1953	Southern California 7, Wisconsin 0
1934	Columbia 7, Stanford 0		

\* Played at Durham, N. C.

### Lions Overwhelm All-Stars

The Detroit Lions, champions of the National Football League, beat the college All-Stars, 31 to 6, at Soldier Field, Chicago, in the first big game of the 1954 season. The annual contest drew a crowd of 93,470 and the gross receipts were \$445,650.

Champion Bang Away of Sirrah Crest, owned and bred by Dr. and Mrs. R. C. Harris of Santa Ana, Calif., gained his 87th best-in-show title at the Lake Mohawk Kennel Club event at Newton, N. J., on Aug. 1, 1954. Bang Away, a boxer, holds the world record for best-in-show awards.

## Sugar Bowl (New Orleans, La.)

1935	Tulane 20, Temple 14
1936	Texas Christian 3, Louisiana State 2
1937	Santa Clara 21, Louisiana State 14
1938	Santa Clara 6, Louisiana State 0
1939	Texas Christian 15, Carnegie Tech 7
1940	Texas A & M 14, Tulane 13
1941	Boston College 19, Tennessee 13
1942	Fordham 2, Missouri 0
1943	Tennessee 14, Tulsa 7
1944	Georgia Tech 20, Tulsa 18
1945	Duke 29, Alabama 26
1946	Oklahoma A & M 33, St. Mary's (Calif.) 13
1947	Georgia 20, North Carolina 10
1948	Texas 27, Alabama 7
1949	Oklahoma 14, North Carolina 6
1950	Oklahoma 35, Louisiana State 0
1951	Kentucky 13, Oklahoma 7
1952	Maryland 28, Tennessee 13
1953	Georgia Tech 24, Mississippi 7

## Cotton Bowl (Dallas, Tex.)

1937	Texas Christian 16, Marquette 6
1938	Rice 28, Colorado 14
1939	St. Mary's (Calif.) 20, Texas Tech 13
1940	Clemson 6, Boston College 3
1941	Texas A & M 13, Fordham 12
1942	Alabama 29, Texas A & M 21
1943	Texas 14, Georgia Tech 7
1944	Randolph Field 7, Texas 7
1945	Oklahoma A & M 34, Texas Christian 0
1946	Texas 40, Missouri 27
1947	Louisiana State 0, Arkansas 0
1948	Southern Methodist 13, Penn State 13
1949	Southern Methodist 21, Oregon 13
1950	Rice 27, North Carolina 13
1951	Tennessee 20, Texas 14
1952	Kentucky 20, Texas Christian 7
1953	Texas 16, Tennessee 0

## Orange Bowl (Miami, Fla.)

1933	Miami 7, Manhattan 0
1934	Duquesne 33, Miami 7
1935	Bucknell 26, Miami 0
1936	Catholic University 20, Mississippi 19
1937	Duquesne 13, Mississippi State 12
1938	Alabama Poly. 6, Michigan State 0
1939	Tennessee 17, Oklahoma 0
1940	Georgia Tech 21, Missouri 7
1941	Mississippi State 14, Georgetown 7
1942	Georgia 40, Texas Christian 26
1943	Alabama 37, Boston College 21

1944	Louisiana State 19, Texas A & M 14
1945	Tulsa 26, Georgia Tech 12
1946	Miami 13, Holy Cross 6
1947	Rice 8, Tennessee 0
1948	Georgia Tech 20, Kansas 14
1949	Texas 41, Georgia 28
1950	Santa Clara 21, Kentucky 13
1951	Clemson 15, Miami (Fla.) 14
1952	Georgia Tech 17, Baylor 14
1953	Alabama 61, Syracuse 6

## Famous Series Records

Year	Harv. Yale	Yale Prin.	Harv. Prin.	Army-Navy	Year	Harv. Yale	Yale Prin.	Harv. Prin.	Army-Navy
1883	2 23	6 0	7 26	.. ..	1920	9 0	0 20	14 14	0 7
1884	0 52	0 0	6 36	.. ..	1921	10 3	13 7	3 10	0 7
1885	.. ..	5 6	.. ..	.. ..	1922	10 3	0 3	3 10	17 14
1886	4 29	0 0	0 12	.. ..	1923	0 13	27 0	5 0	0 0
1887	8 17	12 0	12 0	.. ..	1924	6 19	10 0	0 34	12 0
1888	.. ..	10 0	6 18	.. ..	1925	0 0	12 25	0 36	10 3
1889	0 6	0 10	15 41	.. ..	1926	7 12	7 10	0 12	21 21
1890	12 6	32 0	.. ..	0 24	1927	0 14	14 6	.. ..	14 9
1891	0 10	19 0	.. ..	32 16	1928	17 0	2 12	.. ..	.. ..
1892	0 6	12 0	.. ..	4 12	1929	10 6	13 0	.. ..	.. ..
1893	0 6	0 6	.. ..	4 6	1930	13 0	10 7	.. ..	6 0
1894	4 12	24 0	.. ..	.. ..	1931	0 3	51 14	.. ..	17 7
1895	.. ..	20 10	4 12	.. ..	1932	0 19	7 7	.. ..	20 0
1896	.. ..	6 24	0 12	.. ..	1933	19 6	2 27	.. ..	12 7
1897	0 0	6 0	.. ..	.. ..	1934	0 14	7 0	0 19	0 3
1898	17 0	0 6	.. ..	.. ..	1935	7 14	7 38	0 35	28 6
1899	0 0	10 11	.. ..	17 5	1936	13 14	26 23	14 14	0 7
1900	0 28	29 5	.. ..	7 11	1937	13 6	26 0	34 6	6 0
1901	22 0	12 0	.. ..	11 5	1938	7 0	7 20	26 7	14 7
1902	0 23	12 5	.. ..	22 8	1939	7 20	7 13	6 9	0 10
1903	0 16	6 11	.. ..	40 5	1940	28 0	7 10	0 0	0 14
1904	0 12	12 0	.. ..	11 0	1941	14 0	6 20	6 4	6 14
1905	0 6	23 4	.. ..	6 6	1942	3 7	13 6	19 14	0 14
1906	0 6	0 0	.. ..	0 10	1943	.. ..	27 6	.. ..	0 13
1907	0 12	12 10	.. ..	0 6	1944	.. ..	.. ..	.. ..	23 7
1908	4 0	11 6	.. ..	6 4	1945	0 28	20 14	.. ..	32 13
1909	0 8	17 0	.. ..	.. ..	1946	14 27	30 2	13 12	21 18
1910	0 0	5 3	.. ..	0 3	1947	21 31	0 17	7 33	21 0
1911	0 0	3 6	6 8	0 3	1948	20 7	14 20	7 47	21 21
1912	20 0	6 6	16 6	0 6	1949	6 29	13 21	13 33	38 0
1913	15 5	3 3	3 0	22 9	1950	6 14	12 47	26 63	2 14
1914	36 0	19 14	20 0	20 0	1951	21 21	0 27	13 54	7 42
1915	41 0	13 7	10 6	14 0	1952	14 41	21 27	21 41	0 7
1916	3 6	10 0	3 0	15 7	1953	13 0	26 24	0 6	20 7
1919	10 3	6 13	10 10	0 6					



## Professional Football

### NATIONAL LEAGUE CHAMPIONS

Source: National Football League.

Year	Team	Won	Lost	Tied	Pct.	Year	Team	Won	Lost	Tied	Pct.
1921	Bears (Staley's).....	10	1	1	.909	1940	Washington Redskins (E)....	9	2	0	.818
1922	Canton Bulldogs.....	10	0	2	1.000	1941	*Chicago Bears (W).....	10	1	0	.909
1923	Canton Bulldogs.....	11	0	1	1.000	1941	New York Giants (E).....	8	3	0	.727
1924	Cleveland Bulldogs.....	7	1	1	.875	1942	*Washington Redskins (E)....	10	1	0	.909
1925	Chicago Cardinals.....	11	2	1	.846	1942	Chicago Bears (W).....	11	0	0	1.000
1926	Frankford Yellow Jackets....	14	1	1	.933	1943	*Chicago Bears (W).....	8	1	1	.889
1927	New York Giants.....	11	1	1	.917	1943	Washington Redskins (E)....	6	3	1	.667
1928	Providence Steamrollers.....	8	1	2	.888	1944	*Green Bay Packers (W).....	8	2	0	.800
1929	Green Bay Packers.....	12	0	1	1.000	1944	New York Giants (E).....	8	1	1	.889
1930	Green Bay Packers.....	11	3	1	.785	1945	*Cleveland Rams (W).....	9	1	0	.900
1931	Green Bay Packers.....	12	2	0	.857	1945	Washington Redskins (E)....	8	2	0	.800
1932	Chicago Bears.....	7	1	6	.875	1946	*Chicago Bears (W).....	8	2	1	.800
1933	*Chicago Bears (W).....	10	2	1	.833	1946	New York Giants (E).....	7	3	1	.700
1933	New York Giants (E).....	11	3	0	.786	1947	*Chicago Cardinals (W).....	9	3	0	.750
1934	*New York Giants (E).....	8	5	0	.615	1947	Philadelphia Eagles (E).....	9	4	0	.692
1934	Chicago Bears (W).....	13	0	0	1.000	1948	*Philadelphia Eagles (E).....	9	2	1	.818
1935	*Detroit Lions (W).....	7	3	2	.700	1948	Chicago Cardinals (W).....	11	1	0	.917
1935	New York Giants (E).....	9	3	0	.750	1949	*Philadelphia Eagles (E).....	11	1	0	.917
1936	*Green Bay Packers (W).....	10	1	1	.909	1949	Los Angeles Rams (W).....	8	2	2	.800
1936	Boston Redskins (E).....	7	5	0	.587	1950	*Cleveland Browns (A).....	11	2	0	.846
1937	*Washington Redskins (E)....	8	3	0	.727	1950	Los Angeles Rams (N).....	10	3	0	.769
1937	Chicago Bears (W).....	9	1	1	.900	1951	*Los Angeles Rams (N).....	8	4	0	.667
1938	*New York Giants (E).....	8	2	1	.800	1951	Cleveland Browns (A).....	11	1	0	.917
1938	Green Bay Packers (W).....	8	3	0	.727	1952	*Detroit Lions (N).....	9	3	0	.750
1939	*Green Bay Packers (W).....	9	2	0	.818	1952	Cleveland Browns (A).....	8	4	0	.667
1939	New York Giants (E).....	9	1	1	.900	1953	*Detroit Lions (W).....	10	2	0	.833
1940	*Chicago Bears (W).....	8	3	0	.727	1953	Cleveland Browns (E).....	11	1	0	.917

\* Won title play-off. (W) Western Division champion. (E) Eastern Division champion. League divided into American (A) and National (N) conferences in 1950. In 1953 the league returned to the Eastern-Western set-up.

### CHAMPIONSHIP PLAY-OFF RESULTS

1933	Chicago Bears 23, New York 21.	1944	Green Bay 14, New York 7.
1934	New York 30, Chicago Bears 13.	1945	Cleveland 15, Washington 14.
1935	Detroit 26, New York 7.	1946	Chicago Bears 24, New York 14.
1936	Green Bay 21, Boston 6.	1947	Chicago Cardinals 28, Philadelphia 21.
1937	Washington 28, Chicago Bears 21.	1948	Philadelphia 7, Chicago Cardinals 0.
1938	New York 23, Green Bay Packers 17.	1949	Philadelphia 14, Los Angeles 0.
1939	Green Bay 27, New York 0.	1950	Cleveland 30, Los Angeles 28.
1940	Chicago Bears 73, Washington 0.	1951	Los Angeles 24, Cleveland 17.
1941	Chicago Bears 37, New York 9.	1952	Detroit 17, Cleveland 7.
1942	Washington 14, Chicago Bears 6.	1953	Detroit 17, Cleveland 16.
1943	Chicago Bears 41, Washington 21.		

## CHESS

Source: American Chess Bulletin of New York.

### World Champions

1851-58	Adolph Anderssen, Breslau, Germany
1858-62	Paul Morphy, New Orleans, La.
1862-66	Adolf Anderssen, Breslau, Germany
1866-94	William Steinitz, Vienna, Austria
1894-1921	Emanuel Lasker, Berlin, Germany
1921-27	Jose R. Capablanca, Havana, Cuba
1927-35	Alexander A. Alekhine, Moscow, Russia
1935-37	Dr. Max Euwe, Amsterdam, the Netherlands
1937-46	Alexander A. Alekhine, Moscow, Russia*
1948-	Mikhail Botvinnik, Leningrad, Russia

\* Alekhine, a French citizen, died on March 23, 1946, leaving the world championship vacant.

### United States Champions

1852-62	Paul Morphy, New Orleans, La.
1871-87	George H. Mackenzie, New York
1887-92	Max Judd, St. Louis, Mo.
1892-94	Simon Lipschuetz, New York
1894	Jackson W. Showalter, Georgetown, Ky.
1894	Albert B. Hodges, Staten Island, N. Y.*
1894-97	Jackson W. Showalter, Georgetown, Ky.
1897-1906	Harry Nelson Pillsbury, Boston, Mass.
1906-09	Jackson W. Showalter, Georgetown, Ky.
1909-36	Frank J. Marshall, New York
1936-44	Samuel Reshevsky, New York†
1944-46	Arnold S. Denker, New York
1946	Samuel Reshevsky, Boston
1948	Herman Steiner, Los Angeles
1951	Larry Evans, New York
1954	Arthur Bisguier, New York

\* Retired after winning return match with Showalter.

† In 1942, Isaac I. Kashdan of New York was co-champion for a while because of a tie with Reshevsky in that year's tournament. Reshevsky won the play-off.

## LACROSSE

### North-South Game Record

1940—North 6, South 5	1947—North 15, South 3
1941—South 7, North 6	1948—North 11, South 6
1942—North 6, South 3	1949—South 11, North 6
1943—South 9, North 5	1950—North 12, South 8
1944-45—No games	1951—North 12, South 11
1946—North 14, South 14	1952—South 15, North 7
1953—South 12, North 9	

ROWING

ROWING goes back so far in history that there is no possibility of tracing it to any particular aboriginal source. The oldest rowing race still on the calendar is the "Doggett's Coat and Badge" contest among professional watermen of the Thames (England) that began in 1715. The first Oxford-Cambridge race was held at Henley in 1829. Competitive rowing in the United States began with matches between boats rowed by professional oarsmen of the New York water front. They were oarsmen who rowed the small boats that plied as ferries from Manhattan Island to Brooklyn and return, or who rowed salesmen down the harbor to meet ships arriving from Europe. Since the first salesman to meet an incoming ship had some advantage over his rivals, there was keen competition in the bidding for fast boats and the best oarsmen. This gave rise to match races for a purse or a side bet on many occasions. The first of such races was held in June, 1811, in four-oared gigs.

Amateur boat clubs sprang up in the United States between 1820 and 1830 and

seven students of Yale joined together to purchase a four-oared lap-streak gig in 1843. The first Harvard-Yale race was held Aug. 3, 1852, on Lake Winnepesaukee, N. H. The first time an American college crew went abroad was in 1869 when Harvard challenged Oxford and was defeated on the Thames. There were early college rowing races on Lake Quinsigamond, near Worcester, Mass., and on Saratoga Lake, N. Y., but the Intercollegiate Rowing Association, in 1895, settled on the Hudson, at Poughkeepsie, as the setting for the annual "Poughkeepsie Regatta." In 1950 the I.R.A. shifted its classic to Marietta, Ohio, and in 1952 it was moved to Syracuse, N. Y. The National Association of Amateur Oarsmen, organized in 1872, has conducted annual championship regattas since that time. The first rowing races were held with lap-streak gigs but shells came into general favor about a century ago. The outrigger was invented in 1830 by Clasper, an Englishman. Yale used the sliding seat in 1870.

Rowing Statistics

Source: From *American Rowing*, Copyright by Robert F. Kelley; courtesy of G. P. Putnam's Sons.

Yale-Harvard Varsity Race Record

Rowed at Centre Harbor, N. H., in 1852; Springfield, Mass., in 1855, 1872-73, 1876-77; Worcester, Mass., 1859 to 1870; Saratoga Lake, N. Y., 1874-75; New London, Conn., 1878 to 1895, 1898 to 1916, 1919 to 1941, and since 1947; triangular race at Poughkeepsie, N. Y., in 1897 with Cornell victor in 20:34; Derby, Conn., in 1918, 1942, and Boston, Mass., in 1946. Course was 2 miles in 1852; 3 miles from 1855 to 1875, and 4 miles thereafter.

Year	Winner	Time	Year	Winner	Time	Year	Winner	Time
1852	Harvard	1	1891	Harvard	21:23	1922	Yale	21:53
1855	Harvard	22:00	1892	Yale	20:48	1923	Yale	22:10
1859	Harvard	19:18	1893	Yale	25:01½	1924	Yale	21:58½
1860	Harvard	18:53	1894	Yale	23:45½	1925	Yale	20:26
1864	Yale	19:01	1895	Yale	21:30	1926	Yale	20:14½
1865	Yale	18:42½	1897	Yale	20:44	1927	Harvard	22:35½
1866	Harvard	18:43¾	1898	Yale	24:02	1928	Yale	20:21½
1867	Harvard	18:12¾	1899	Harvard	20:52½	1929	Yale	21:20
1868	Harvard	17:48½	1900	Yale	21:12½	1930	Yale	20:09½
1869	Harvard	18:02	1901	Yale	23:37	1931	Harvard	22:21
1870	Harvard	20:30 <sup>a</sup>	1902	Yale	20:20	1932	Harvard	21:29
1872	Harvard	16:57	1903	Yale	20:19½	1933	Harvard	22:46½
1873	Yale	16:59	1904	Yale	21:40½	1934	Yale	19:51½
1874 <sup>a</sup>	Harvard	16:56	1905	Yale	22:33½	1935	Yale	20:19
1875	Harvard	17:05	1906	Harvard	23:02	1936	Harvard	20:19
1876	Yale	22:02	1907	Yale	21:10	1937	Harvard	20:02
1877	Harvard	24:36	1908 <sup>a</sup>	Harvard	24:10	1938	Harvard	20:20
1878	Harvard	20:44¾	1909	Harvard	21:50	1939	Harvard	20:48½
1879	Harvard	22:15	1910	Harvard	20:46½	1940	Harvard	21:38
1880	Yale	24:27	1911	Harvard	22:44	1941	Harvard	20:40
1881	Yale	22:13	1912	Harvard	21:43½	1942 <sup>b</sup>	Harvard	10:09½
1882	Harvard	20:47½	1913	Harvard	21:42	1943-45	No races	
1883	Harvard	25:46½	1914	Yale	21:16	1946 <sup>c</sup>	Harvard	9:18
1884	Yale	20:31	1915	Yale	20:52	1947	Harvard	20:40
1885	Harvard	25:15½	1916	Harvard	20:02	1948 <sup>d</sup>	Harvard	19:21½
1886	Yale	20:42	1917	No race		1949 <sup>10</sup>	Yale	19:52½
1887	Yale	22:56	1918 <sup>e</sup>	Harvard	10:58	1950	Harvard	21:36½
1888	Yale	20:10	1919 <sup>e</sup>	Yale	21:42½	1951	Harvard	21:26
1889	Yale	21:30	1920	Harvard	23:11	1952	Yale	22:49
1890	Yale	21:29	1921	Yale	20:41	1953	Harvard	20:09

<sup>1</sup> Harvard won by 3 to 4 lengths. <sup>2</sup> Yale ran into Harvard at turn and was disqualified. <sup>3</sup> Yale did not finish, being disabled in collision. <sup>4</sup> Yale stroke taken from shell near 3-mile mark. <sup>5</sup> Race was informal; rowed at 2 miles on Housatonic. <sup>6</sup> Course was 110 feet less than 4 miles. <sup>7</sup> Rowed at 2 miles. <sup>8</sup> Rowed at 1¼ miles. <sup>9</sup> Both crews broke downstream record. <sup>10</sup> Both crews broke upstream record.

## INTERCOLLEGIATE ROWING ASSOCIATION REGATTA

## (Varsity eight-oared shells—4 miles)

Rowed on Saratoga Lake (3 miles) 1898. Rowed on Lake Cayuga, Ithaca, N. Y. (2 miles) 1920. Racing suspended in 1917, 1918, 1919, 1933, and 1942 to 1946, inclusive. Rowed at 3 miles from 1921 to 1924, inclusive, and since 1947. A Foughkeepsie, N. Y., in other years through 1949; at Marietta, Ohio (2 miles) 1950, 1951; at Syracuse, N. Y., since 1952.

Year	Time	First	Second	Third	Fourth	Fifth	Sixth
1895	21:25	Columbia	Cornell				
1896	19:59	Cornell	Harvard	Pennsylvania	Columbia		
1897	20:47 4/5	Cornell	Columbia				
1898	15:51 1/2	Pennsylvania	Cornell	Wisconsin	Columbia		
1899	20:4	Pennsylvania	Wisconsin	Cornell	Columbia		
1900	19:44 3/5	Pennsylvania	Wisconsin	Cornell	Columbia	Georgetown	
1901	18:53 1/5	Cornell	Columbia	Wisconsin	Georgetown	Syracuse	Pennsylvania
1902	19:5 3/5	Cornell	Wisconsin	Columbia	Pennsylvania	Syracuse	Georgetown
1903	18:57	Cornell	Georgetown	Wisconsin	Pennsylvania	Syracuse	Columbia
1904	20:22 3/5	Syracuse	Cornell	Pennsylvania	Columbia	Georgetown	Wisconsin
1905	20:29	Cornell	Syracuse	Georgetown	Columbia	Pennsylvania	Wisconsin
1906	19:36 4/5	Cornell	Pennsylvania	Syracuse	Wisconsin	Columbia	Georgetown
1907	20:2 2/5	Cornell	Columbia	Navy	Pennsylvania	Wisconsin	Georgetown
1908	19:24 1/5	Syracuse	Columbia	Cornell	Pennsylvania	Wisconsin	
1909	19:2	Cornell	Columbia	Syracuse	Wisconsin	Pennsylvania	
1910	20:42 1/5	Cornell	Pennsylvania	Columbia	Syracuse	Wisconsin	
1911	20:10 4/5	Cornell	Columbia	Pennsylvania	Wisconsin	Syracuse	
1912	19:31 2/5	Cornell	Wisconsin	Columbia	Syracuse	Pennsylvania	Stanford
1913	19:28 3/5	Syracuse	Cornell	Washington	Wisconsin	Columbia	Pennsylvania
1914	19:37 4/5	Columbia	Pennsylvania	Cornell	Syracuse	Washington	Wisconsin
1915	19:36 3/5	Cornell	Stanford	Syracuse	Columbia	Pennsylvania	
1916	20:15 2/5	Syracuse	Cornell	Columbia	Pennsylvania		
1920	11:2 3/5	Syracuse	Cornell	Columbia	Pennsylvania		
1921	14:7	Navy	California	Cornell	Pennsylvania	Syracuse	Columbia
1922*	13:33 3/5	Navy	Washington	Syracuse	Cornell	Columbia	Pennsylvania
1923	14:3 1/5	Washington	Navy	Columbia	Syracuse	Cornell	Pennsylvania
1924	15:2	Washington	Wisconsin	Cornell	Pennsylvania	Syracuse	Columbia
1925	19:24 4/5	Navy	Washington	Wisconsin	Pennsylvania	Cornell	Syracuse
1926	19:28 3/5	Washington	Navy	Syracuse	Pennsylvania	Columbia	California
1927	20:57	Columbia	Washington	California	Navy	Cornell	Syracuse
1928	18:35 4/5	California	Columbia	Washington	Cornell	Navy	Syracuse
1929	22:58	Columbia	Washington	Pennsylvania	Navy	Wisconsin	
1930	21:42	Cornell	Syracuse	M. I. T.	California	Columbia	Washington
1931	18:54 1/5	Navy	Cornell	Washington	California	Syracuse	Pennsylvania
1932	19:55	California	Cornell	Washington	Navy	Syracuse	Columbia
1934	19:44	California	Washington	Navy	Cornell	Pennsylvania	Syracuse
1935	18:52	California	Cornell	Washington	Navy	Syracuse	Pennsylvania
1936	19:9 3/5	Washington	California	Navy	Columbia	Cornell	Pennsylvania
1937	18:33 3/5	Washington	Navy	Cornell	Syracuse	California	Columbia
1938	18:19	Navy	California	Washington	Columbia	Wisconsin	Cornell
1939†	18:12 3/5	California	Washington	Navy	Cornell	Syracuse	Wisconsin
1940	22:42	Washington	Cornell	Syracuse	Navy	California	Columbia
1941	18:53 3/10	Washington	California	Cornell	Syracuse	Princeton	Wisconsin
1947	13:59 1/5	Navy	Cornell	Washington	California	Princeton	Syracuse
1948	14:06 2/5	Washington	California	Navy	Cornell	M. I. T.	Princeton
1949	14:42 3/5	California	Washington	Cornell	Navy	Princeton	Pennsylvania
1950	8:07.5	Washington	California	Wisconsin	Stanford	M. I. T.	Columbia
1951	7:50.5	Wisconsin	Washington	Princeton	California	Pennsylvania	M. I. T.
1952	15:08.1	Navy	Princeton	Cornell	Wisconsin	California	Columbia
1953	15:29.6	Navy	Cornell	Washington	Wisconsin	Columbia	California

\* Record for three miles. † Record for four miles.

SEVENTH—1925, Columbia; 1926, Wisconsin; 1927, Pennsylvania; 1928, Pennsylvania; 1930, Pennsylvania; 1931, Columbia; 1932, Pennsylvania; 1934, Columbia; 1935, Columbia; 1936, Syracuse; 1937, Wisconsin; 1938, Syracuse; 1939, Columbia; 1940, Wisconsin; 1941, Rutgers; 1947, Wisconsin; 1948, Pennsylvania; 1949, Wisconsin; 1950, Cornell; 1951, Stanford; 1952, Washington; 1953, Pennsylvania

EIGHTH—1926, Cornell; 1930, Wisconsin; 1931, Wisconsin; 1932, M. I. T.; 1940, Princeton; 1941, M. I. T.; 1947, M. I. T.; 1948, Wisconsin; 1949, Columbia; 1950, Pennsylvania; 1951, Cornell; 1952, Stanford; 1953, Princeton.

NINTH—1931, M. I. T.; 1941, Columbia; 1947, Pennsylvania; 1948, Syracuse; 1949, Syracuse; 1950, Princeton; 1951, Syracuse; 1952, Pennsylvania; 1953, Syracuse.

TENTH—1947, Rutgers; 1948, Columbia; 1949, Stanford; 1950, Syracuse; 1951, Boston U.; 1952, M. I. T.; 1953, M. I. T.

ELEVENTH—1947, Columbia; 1948, Rutgers; 1949, M. I. T.; 1950, Rutgers; 1951, Columbia; 1952, Syracuse; 1953, Stanford

TWELFTH—1949, Rutgers; 1950, Navy; 1951, Navy

SWAMPED—1895, Pennsylvania; 1897, Pennsylvania; 1907, Syracuse; 1929, M. I. T., Syracuse, California, Cornell; 1930, Navy.



## SQUASH RACQUETS

Source: United States Squash Racquets Association.

### National Singles Champions

1907-08.....	John A. Miskey, Overbrook G. C.	1931.....	J. Lawrence Pool, Harvard Club, New York
1909.....	W. L. Freeland, Germantown C. C.	1932.....	Beekman Pool, Harvard University
1910.....	John A. Miskey, Overbrook G. C.	1933.....	Beekman Pool, Harvard Club, New York
1911.....	F. S. White, Germantown C. C.	1934.....	Neil J. Sullivan, Germantown C. C.
1912.....	Constantine Hutchins, Boston A. A.	1935.....	Donald Strachan, Philadelphia C. C.
1913.....	Mortimer L. Newhall, Germantown C. C.	1936.....	Germain G. Glidden, Harvard University
1914.....	Constantine Hutchins, Boston T. and R. Club	1937-38.....	Germain G. Glidden, Harvard Club, New York
1915-17.....	Stanley W. Pearson, Germantown C. C.	1939.....	Donald Strachan, Merion C. C.
1918-19.....	No tournaments	1940.....	A. Willing Patterson, Philadelphia R. C.
1920.....	Charles C. Peabody, Union B. C., Boston	1941-42.....	Charles W. Brinton, Princeton University
1921-23.....	Stanley W. Pearson, Philadelphia R. C.	1943-45.....	No tournaments
1924.....	Gerald Roberts, Bath Club, London	1946-47.....	Charles W. Brinton, Philadelphia
1925.....	W. Palmer Dixon, Harvard University	1948.....	Stanley W. Pearson, Jr., Philadelphia
1926.....	W. Palmer Dixon, R. and T. Club, N. Y.	1949.....	Hunter H. Lott, Jr., Merion C. C.
1927.....	Myles P. Baker, Boston A. A.	1950-51.....	Edward Hahn, Detroit
1928.....	Herbert N. Rawlins, Jr., R. and T. Club, N. Y.	1952.....	Harry Conlon, Buffalo, N. Y.
1929.....	J. Lawrence Pool, Harvard Club, New York	1953.....	Ernie Howard, Toronto
1930.....	Herbert N. Rawlins, Jr., R. and T. Club, N. Y.		

### Lapham International Trophy Record

Year	Result	Where played	Year	Result	Where played
1922	U. S. 11, Canada 2.....	Boston	1938	U. S. 13, Canada 2.....	Boston
1923	U. S. 9, Canada 3.....	Toronto	1939	Canada 11, U. S. 4.....	Toronto
1924	U. S. 7½, England 6, Canada 1½.....	Philadelphia	1940	Canada 10, U. S. 5.....	Hartford
1925	U. S. 10, Canada 5.....	Montreal	1941	U. S. 8, Canada 7.....	Toronto
1926	U. S. 13, Canada 2.....	New York	1942	U. S. 13, Canada 2.....	Rochester, N. Y.
1927	England 17½, U. S. 16½, Canada 11.....	Toronto	1943	Canada 7, U. S. 5.....	Montreal
1928	U. S. 14, Canada 1.....	Buffalo	1944	U. S. 12, Canada 3.....	New York
1929	Canada 8, U. S. 4.....	Hamilton	1945	Canada 12, U. S. 3.....	Toronto
1930	U. S. 8, Canada 1.....	Baltimore	1946	U. S. 13, Canada 2.....	Boston
1931	Canada 6, U. S. 5.....	Quebec	1947	Canada 9, U. S. 6.....	Hamilton
1932	U. S. 8, Canada 0.....	Hartford	1948	U. S. 15, Canada 5.....	Hartford
1933	Canada 11, U. S. 4.....	Toronto	1949	Canada 7, U. S. 3.....	Quebec
1934	U. S. 10, Canada 1.....	Cedarhurst, N. Y.	1950	U. S. 7, Canada 6.....	Providence
1935	U. S. 11, Canada 4.....	Montreal	1951	U. S. 8, Canada 7.....	Toronto
1936	U. S. 10, Canada 2.....	Detroit	1952	Canada 9, U. S. 6.....	Rochester, N. Y.
1937	Canada 8, U. S. 7.....	Montreal	1953	U. S. 9, Canada 6.....	Montreal

## RACQUETS

Source: Allison Danzig, *The New York Times*.

### National Champions

1890	B. Spalding de Garmendia, N. Y. Racquet Court	1917	C. C. Pell, R. and T. Club and Tuxedo
1891	B. Spalding de Garmendia, R. and T. Club	1918-19	No tournaments
1892	J. S. Tooker, R. and T. Club, Boston A. A.	1920-22	C. C. Pell, R. and T. Club and Tuxedo
1893-94	B. Spalding de Garmendia, R. and T. Club	1923	S. G. Mortimer, R. and T. Club and Tuxedo
1895	J. S. Tooker, R. and T. Club, Boston A. A.	1924-25	C. C. Pell, R. and T. Club and Tuxedo
1896-97	B. Spalding de Garmendia, R. and T. Club	1926	S. G. Mortimer, R. and T. Club and Tuxedo
1898	F. F. Rolland, Canada	1927-28	C. C. Pell, R. and T. Club and Tuxedo
1899	Quincy A. Shaw, Jr., Boston A. A.	1929	H. D. Sheldon, R. and T. Club
1900	Eustace H. Miles, England	1930	S. G. Mortimer, R. and T. Club and Tuxedo
1901	Quincy A. Shaw, Jr., Boston A. A.	1931-33	C. C. Pell, R. and T. Club and Tuxedo
1902	Clarence H. Mackay, R. and T. Club	1934	E. M. Edwards, Philadelphia R. C.
1903	Payne Whitney, R. and T. Club	1935	H. D. Sheldon, R. and T. Club
1904	George H. Brooke, Philadelphia R. C.	1936	E. M. Edwards, Philadelphia R. C.
1905	Lawrence Waterbury, R. and T. Club	1937-39	Robert Grant, III, R. and T. Club
1906	Percy D. Haughton, R. and T. Club	1940	Warren Ingersoll, III, Philadelphia R. C.
1907	Reginald Fincke, R. and T. Club	1941	Robert Grant, III, R. and T. Club
1908	Quincy A. Shaw, Jr., Boston T. and R. Club	1942-45	No tournaments
1909	H. F. McCormick, University Club, Chicago	1946	Robert Grant, III, R. and T. Club
1910	Quincy A. Shaw, Jr., Boston T. and R. Club	1947	J. Richards Leonard, R. and T. Club
1911-12	Reginald Fincke, R. and T. Club	1948-51	Robert Grant, III, R. and T. Club
1913-14	Lawrence Waterbury, R. and T. Club	1952	S. W. Pearson, Jr., Philadelphia R. C.
1915	C. C. Pell, R. and T. Club and Tuxedo	1953	Robert Grant, III, R. and T. Club
1916	S. G. Mortimer, R. and T. Club and Tuxedo		

## Tuxedo (N. Y.) Gold Racquet Winners

1904	M. S. Barger, R. and T. Club
1905-07	C. H. Mackay, R. and T. Club
1908	J. G. Douglas, R. and T. Club
1909	H. F. McCormick, Chicago Univ. Club
1910	G. C. Clark, R. and T. Club
1911-12	J. G. Douglas, R. and T. Club
1913	H. F. McCormick, Chicago Univ. Club
1914-17	C. C. Pell, R. and T. Club and Tuxedo
1918-20	No tournaments
1921-23	C. C. Pell, R. and T. Club and Tuxedo
1924	S. G. Mortimer, R. and T. Club and Tuxedo
1925-27	C. C. Pell, R. and T. Club and Tuxedo
1928	S. G. Mortimer, R. and T. Club and Tuxedo
1929-30	C. C. Pell, R. and T. Club and Tuxedo
1931	S. G. Mortimer, R. and T. Club and Tuxedo

1932-33	C. C. Pell, R. and T. Club and Tuxedo
1934	J. R. Leonard, R. and T. Club
1935	H. B. Sheldon, R. and T. Club
1936	C. C. Pell, R. and T. Club and Tuxedo
1937-39	R. Grant, III, R. and T. Club
1940	J. R. Leonard, R. and T. Club
1941	R. Grant, III, R. and T. Club
1942-45	No tournaments
1946-47	R. Grant, III, R. and T. Club
1948	J. R. Leonard, R. and T. Club
1949-50	R. Grant, III, R. and T. Club
1951	R. A. A. Holt, London, England
1952	S. W. Pearson, Jr., Philadelphia R. C.
1953	Geoffrey W. T. Atkins, England

## SQUASH TENNIS

## National Champions

Year	Winner and Club
1911-12.....	Alfred Stillman, Harvard
1913.....	George Whitney, Harvard
1914.....	Alfred Stillman, Harvard
1915-17.....	Eric S. Winston, Harvard
1918.....	Fillmore Van S. Hyde, Harvard
1919.....	John W. Appel, Jr., Harvard
1920.....	Auguste J. Cordier, Yale
1921.....	Fillmore Van S. Hyde, Harvard
1922.....	Thomas R. Coward, Yale
1923.....	R. Earl Fink, Crescent
1924.....	Fillmore Van S. Hyde, Harvard
1925.....	William Rand, Jr., Harvard
1926.....	Fillmore Van S. Hyde, Harvard

Year	Winner and Club
1927-29.....	Rowland B. Haines, Columbia
1930-37.....	Harry F. Wolf, New York A. C.
1938.....	Harry F. Wolf, Montclair
1939-40.....	Harry F. Wolf, New York A. C.
1941.....	Joseph J. Lordi, New York A. C.
1942-45.....	No tournaments
1946.....	Frank R. Hanson, Columbia
1947.....	Frederick B. Ryan, Jr., Yale
1948-49.....	H. Robert Reeve, Bayside T. C.
1950.....	H. Robert Reeve, Nassau C. C.
1951.....	J. T. P. Sullivan, Yale
1952.....	H. Robert Reeve, New York A. C.
1953.....	Howard J. Rose, Princeton Club

## COURT TENNIS

Source: Allison Danzig, *The New York Times*.

## National Champions

1892	Richard D. Sears, Boston A. A.
1893	Fiske Warren, Boston A. A.
1894-95	B. Spalding de Garmendia, R. and T. Club
1896	Lawrence M. Stockton, Boston A. A.
1897	George R. Fearing, Jr., Boston A. A.
1898-99	Lawrence M. Stockton, Boston A. A.
1900	Eustace H. Miles, England
1901-04	Joshua Crane, Boston A. A.
1905	Charles E. Sands, R. and T. Club
1906-17	Jay Gould, Philadelphia R. C.
1918-19	No tournaments
1920-25	Jay Gould, Philadelphia R. C.
1926	C. Suydam Cutting, R. and T. Club
1927	George Huband, England, and Chicago R. C.

1928-29	Hewitt Morgan, R. and T. Club
1930	Lord Aberdare, England
1931-32	William C. Wright, Philadelphia
1933	James H. Van Alen, R. and T. Club
1934-37	Ogden Phipps, R. and T. Club
1938	James H. Van Alen, R. and T. Club
1939	Ogden Phipps, R. and T. Club
1940	James H. Van Alen, R. and T. Club
1941	Alastair B. Martin, R. and T. Club
1942-45	No tournaments
1946	Robert Grant, III, R. and T. Club
1947	E. M. Beals, Jr., Boston
1948-49	Ogden Phipps, Roslyn, N. Y.
1950-53	Alastair B. Martin, R. and T. Club

## National Pistol Champions

## Men

1936—	J. Engbrecht
1937—	Charles Askins, Jr.
1938—	Al Hemming
1939—	Emmett E. Jones
1940-41—	Harry Reeves
1942-45—	No competition
1946—	Harry Reeves
1947—	Huelet Benner
1948—	Harry Reeves
1949—	Huelet Benner
1950—	No competition
1951—	Huelet Benner

1952—	William T. Toney, Jr.
1953—	Harry Reeves

## Women

*1941—	Mildred McCarthy
1942-45—	No competition
1946—	Alice Mathews
1947—	Rosalind Noble
1948—	No competition
1949—	Alice Mathews
1950—	No competition
1951—	Gloria Jacobs Norton
1952—	Maria Hulseman
1953—	Margaret Culbertson
* No official women's champion was recognized before 1941.	

## HARNESS RACING

**OLIVER WENDELL HOLMES**, the famous Autocrat of the Breakfast Table, wrote that the running horse was a gambling toy but the trotting horse was useful and, furthermore, "horse-racing is not a republican institution; horse-trotting is." Oliver Wendell Holmes was a born and bred New Englander and New England was the nursery of the harness racing sport in America. Pacers and trotters were matters of local pride and prejudice in Colonial New England and, shortly after the Revolution, the Messenger and Justin Morgan strains produced many winners in harness racing "matches" along the turnpikes of New York, Connecticut, Rhode Island, Massachusetts, Vermont and New Hampshire.

There was English thoroughbred blood in Messenger and Justin Morgan and, many years later, it was blended in Rysdyk's

Hambletonian, foaled in 1849. Hambletonian was not particularly fast under harness but his descendants have had almost a monopoly of prizes, titles and records in the harness racing game. Hambletonian was purchased as a foal with its dam for a total of \$124 by William Rysdyk of Goshen, N. Y. and made a modest fortune for the purchaser.

Trotters and pacers often were raced under saddle in the old days and, in fact, the custom still survives in some places in Europe. Dexter, the great trotter that lowered the mile record from 2:19 $\frac{1}{4}$  to 2:17 $\frac{1}{4}$  in 1867, was said to handle just as well under saddle as when pulling a sulky. But as sulkies were lightened in weight and improved in design, trotting under saddle became less common and finally faded out in this country.

### Hambletonian Winners

Goshen, N. Y.

(Three-year-old trotters—1 mile)

Run at Syracuse, N. Y., in 1926 and 1928; run at Lexington, Ky., in 1927 and 1929; run at Empire City Race Track, Yonkers, N. Y., in 1943.

Year	Winner	Driver	Best time	Value
1926	Guy McKinney	Nat Ray	2.04 3/4	\$73,451.32
1927	Iosola's Worthy	Marvin Childs	2.03 3/4	54,694.44
1928	Spencer	W. H. Leese	2.02 1/2	66,226.25
1929	Walter Dear	W. R. Cox	2.02 3/4	60,309.60
1930	Hanover's Bertha	Tom Berry	2.03	56,859.84
1931	Calumet Butler	R. McMahon	2.03 1/4	50,921.39
1932	The Marchioness	W. Caton	2.01 1/4	49,489.26
1933	Mary Reynolds	Ben White	2.03 3/4	40,459.88
1934	Lord Jim	H. M. Marshall	2.02 3/4	25,845.44
1935	Greyhound	Sep Palin	2.02 1/4	33,321.00
1936	Rosalind	Ben White	2.01 3/4	35,643.83
1937	Shirley Hanover	H. Thomas	2.01 1/2	37,912.58
1938	McLin Hanover	H. Thomas	2.02 1/4	37,962.37
1939	Peter Astra	H. M. Marshall	2.04 1/4	40,502.46
1940	Spencer Scott	F. Egan	2.02	43,685.45
1941	Bill Gallon	Lee Smith	2.05	38,729.86
1942	The Ambassador	Ben White	2.04	38,954.38
1943	Volo Song	Ben White	2.02 1/2	42,298.03
1944	Yankee Maid	H. Thomas	2.04	33,577.12
1945	Titan Hanover	H. Pownall	2.04	50,196.96
1946	Chestertown	Tom Berry	2.02 1/2	50,995.57
1947	Hoot Mon	Sep Palin	2.00	46,267.93
1948	Demon Hanover	H. R. Hoyt	2.02	59,941.18
1949	Miss Tilly	Fred Egan	2.01 2/5	69,791.08
1950	Lusty Song	Del Miller	2.02	75,209.12
1951	Mainliner	Guy Crippen	2.02 3/5	95,263.93
1952	Sharp Note	Bi Shively	2.02 2/5	87,637.55
1953	Helicopter	Harry Harvey	2.01 3/5	117,117.98

### SUMMARY OF 1954 HAMBLETONIAN

Horse and driver	Heats		Horse and driver	Heats	
	1st	2d		1st	2d
aNewport Dream (Del Cameron)	1	1	dTrue Newport (Russ Bullington)	16	13
bPrincess Rodney (Frank Ervin)	2	3	Crutus (Harry Pownall)	13	16
cHarlan (Jimmy Arthur)	14	2	Runnymede Hathorn (Ben Kemper)	15	15
Vicki Hanover (Jimmy Wingfield)	3	12	aNewport Stock Farm entry	bFrank Ervin entry	
cStenographer (Del Miller)	6	4	cDel Miller Stable entry	dSam Huttenbauer entry	
dPrince Victor (Jimmy Hackett)	4	6	eHayes Fair Acres entry		
eDarn Safe (Benny Shue)	8	5	Times—2.02 4/5, 2.02 4/5. Winner—bay colt by		
fIdeal Hanover (Joe O'Brien)	5	8	Axomite.		
hLord Pick (Ralph Baldwin)	10	7	Purse distribution—Newport Dream, \$57,581.74;		
Rotary Hanover (Don Larlee)	7	10	Princess Rodney, \$20,958.81; Harlan, \$12,563.29;		
dDarn Sweet (Tom Berry)	9	11	Vicki Hanover, \$6,281.65; Stenographer, \$3,664.29;		
ePronto Boy (Fay Fitzpatrick)	11	9	Prince Victor, \$3,664.29. Original nominators of the		
aNewport Pearl (Dana Cameron)	12	14	first six horses split \$2,136.61. Total purse—		
			\$106,830.68.		



# WORLD HARNESS RACING RECORDS

(This compilation recognizes as record-holders those horses which have made the fastest time at their gait, age, and hitch, either against time or in a race at one mile.)

## Trotting on Mile Track

	Time	Driver	Date	Where made
All-age—Greyhound.....	1.55½	S. F. Palin.....	Sept. 29, 1938	Lexington, Ky.
Yearling—Airdale.....	2.15½	H. C. Moody.....	Oct. 2, 1912	Lexington, Ky.
2-year-old—Titan Hanover.....	2.00	Harry Pownall.....	Oct. 4, 1944	Lexington, Ky.
3-year-old—Titan Hanover.....	1.58	Harry Pownall.....	Sept. 7, 1945	DuQuoin, Ill.
4-year-old—Greyhound.....	1.57½ (r)	S. F. Palin.....	Aug. 21, 1936	Springfield, Ill.
4-year-old—Spencer Scott.....	1.57½	Fred Egan.....	Sept. 24, 1941	Lexington, Ky.
Lady driver—Dean Hanover.....	1.58½	Alma Sheppard.....	Sept. 24, 1937	Lexington, Ky.
To Wagon—Lou Dillon.....	2.00	C. K. G. Billings.....	Aug. 24, 1903	Readville, Mass.
To Wagon—Uhlán.....	2.00	C. K. G. Billings.....	Aug. 7, 1911	North Randall, Ohio
Team to Pole—Greyhound and Rosalind.....	1.58½	S. F. Palin.....	Sept. 5, 1939	Indianapolis, Ind.
Team, Three Abreast—Calumet Dubuque, Mac Aubrey, Hollyrood Boris.....	2.10½	T. F. Walsh.....	Aug. 14, 1937	Goshen, N. Y.
Team, Tandem—John R. McElwyn and Hollyrood Harrier.....	2.19½	T. F. Walsh.....	Sept. 7, 1936	Rutland, Vt.
Four-in-Hand—Damiana, Belnut, Maud V., Nutspra.....	2.30	Not recorded.....	July 4, 1896	Chicago, Ill.
Under Saddle—Greyhound.....	2.01½	Mrs. F. D. Johnson.....	Sept. 27, 1940	Lexington, Ky.
With Running Mate—Uhlán.....	1.54½	Chas. Tanner.....	Oct. 9, 1913	Lexington, Ky.

(r) Record made in race.

## Trotting on Half-mile Track

	Time	Driver	Date	Where made
All-age—Greyhound.....	1.59½	S. F. Palin.....	July 16, 1937	Goshen, N. Y.
Yearling—U. Forbes.....	2.21½	H. C. Moody.....	Sept. 18, 1913	Louisville, Ky.
2-year-old—Titan Hanover.....	2.03½ (r)	Harry Pownall.....	Sept. 19, 1944	Delaware, Ohio
3-year-old—Titan Hanover.....	2.01½	Harry Pownall.....	Sept. 18, 1945	Delaware, Ohio
4-year-old—Star's Pride.....	2.00½ (r)	Harry Pownall.....	July 13, 1951	Saratoga Spgs, N. Y.
To Wagon—Sweet Marie.....	2.08½	W. J. Andrews.....	Sept. 21, 1907	Allentown, Pa.
Team to Pole—Calumet Dubuque and Hollyrood Boris.....	2.06½	T. F. Walsh.....	Aug. 19, 1937	Skowhegan, Me.
Team, Three Abreast—David Thornton, Hollyrood Boris, Capital Stock.....	2.22½	T. F. Walsh.....	July 2, 1937	Gorham, Maine
Under Saddle—Hollyrood Boris.....	2.09	Helen James.....	Sept. 17, 1936	Brockton, Mass.

(r) Record made in race.

## Pacing on Mile Track

	Time	Driver	Date	Where made
All-age—Billy Direct.....	1.55	Vic Fleming.....	Sept. 28, 1938	Lexington, Ky.
Yearling—Royal Lady 2nd.....	2.14½	O. M. Powell.....	Oct. 20, 1939	Indianapolis, Ind.
2-year-old—Adios Boy.....	1.58½	Howard Camden.....	Oct. 3, 1953	Lexington, Ky.
3-year-old—Solicitor.....	1.57½	Delvin Miller.....	Oct. 1, 1951	Lexington, Ky.
3-year-old—Tar Heel.....	1.57½	Delvin Miller.....	Oct. 2, 1951	Lexington, Ky.
4-year-old—Billy Direct.....	1.55	Vic Fleming.....	Sept. 28, 1938	Lexington, Ky.
Lady Driver—Highland Scott.....	1.59½	Mrs. E. R. Harriman.....	Aug. 22, 1929	Goshen, N. Y.
To Wagon—Dan Patch.....	1.57½ (w)	M. E. McHenry.....	Oct. 27, 1903	Memphis, Tenn.
Team to Pole—Minor Heir and George Gano.....	2.02	E. J. McCarr.....	Oct. 1, 1912	Columbus, Ohio
Under Saddle—George Gano.....	2.10½	M. Anderson.....	Sept. 2, 1915	Madison, Wis.
With Running Mate—Flying Jib.....	1.58½	A. McDowell.....	Oct. 4, 1894	Chillicothe, Ohio

(w) With windshield.

## Pacing on Half-mile Track

	Time	Driver	Date	Where made
All-age—Hi-Lo's Forbes.....	1.58½ (r)	Henry Clukey.....	June 6, 1953	Westbury, N. Y.
Yearling—Lady Patch.....	2.18½	O. M. Powell.....	1924	"
2-year-old—Adios Boy.....	2.03 (r)	Howard Camden.....	Aug. 4, 1953	Westbury, N. Y.
3-year-old—Tar Heel.....	2.00 (r)	Adelbert Cameron.....	Sept. 20, 1951	Delaware, Ohio
4-year-old—Sampson Hanover.....	1.59½ (r)	Frank Ervin.....	Sept. 19, 1951	Delaware, Ohio
To Wagon—Dan Patch.....	2.05 (w)	H. C. Hersey.....	Sept. 21, 1905	Allentown, Pa.
Team to Pole—Billy Direct and The Widower.....	2.04½	Chas. Fleming.....	Oct. 12, 1939	Altamont, N. Y.
Under Saddle—Zombro Hanover.....	2.06½	J. Weipert.....	Sept. 21, 1935	Newark, N. J.

\* Data unavailable.

(r) Record made in race.

(w) With windshield.

## ICE HOCKEY

**I**CE HOCKEY, by birth and upbringing a Canadian game, is an offshoot of field hockey. Some historians state that the first ice hockey game was played in Montreal in December, 1879, between two teams composed almost exclusively of McGill University students, but others assert that Kingston, Ont., or Halifax, N. S., were scenes of earlier hockey games. In the Montreal game of 1879 there were fifteen players on a side and they used an assortment of crude sticks to keep the puck in motion. Early rules allowed nine men on a side but the number was reduced to seven in 1886 and finally reduced to six, the standard of today.

The first governing body of the sport was the Amateur Hockey Association of Canada, organized in 1887. In the winter of 1894-95 a group of college students from the United States visited Canada, saw hockey played, became enthused over the game and introduced it as a winter sport when they returned home. This was the

start of hockey in the United States. The first professional league was the International Hockey League that operated, strangely enough, not in Canada but in northern Michigan in 1904-06 and included as players such famous stars as Cyclone Taylor and Hod Stuart, later included in the Hockey Hall of Fame.

Until 1910, professionals and amateurs were allowed to play together on "mixed teams," but this arrangement ended with the formation of the first "big league," the National Hockey Association, in eastern Canada in 1910. The Pacific Coast League, to provide professional hockey in the West, was organized in 1911 with Seattle (and later other American cities) included in the circuit. The National Hockey League replaced the National Hockey Association in 1917. Boston, in 1924, was the first American city to join that circuit. The Stanley Cup, top trophy of hockey, was competed for by "mixed teams" from 1894 to 1910, thereafter by professionals.

### Professional Statistics

Source: Carl Grothmann, Hockey Department, Madison Square Garden

### STANLEY CUP WINNERS

Emblematic of world professional championship.

1894—Montreal A. A. A.  
1895—Montreal Victorias  
1896—Winnipeg Victorias  
1897—Montreal Victorias  
1898—Montreal Victorias  
1899—Montreal Victorias  
1900—Montreal Shamrocks  
1901—Winnipeg Victorias  
1902—Montreal A. A. A.  
1903—Ottawa Silver Seven  
1904—Ottawa Silver Seven  
1905—Ottawa Silver Seven  
1906—Montreal Wanderers  
1907—Kenora Thistles  
1907—Mont. Wanderers\*  
1908—Montreal Wanderers

1909—Ottawa Senators  
1910—Montreal Wanderers  
1911—Ottawa Senators  
1912—Quebec Bulldogs  
1913—Quebec Bulldogs  
1914—Toronto  
1915—Vancouver Millionaires  
1916—Montreal Canadiens  
1917—Seattle Metropolitans  
1918—Toronto Arenas  
1919—Series unfinished†  
1920—Ottawa Senators  
1921—Ottawa Senators  
1922—Toronto St. Patricks  
1923—Ottawa Senators

1924—Montreal Canadiens  
1925—Victoria Cougars  
1926—Montreal Maroons  
1927—Ottawa Senators  
1928—N. Y. Rangers  
1929—Boston Bruins  
1930—Montreal Canadiens  
1931—Montreal Canadiens  
1932—Toronto Maple Leafs  
1933—N. Y. Rangers  
1934—Chicago Black Hawks  
1935—Montreal Maroons  
1936—Detroit Red Wings  
1937—Detroit Red Wings  
1938—Chicago Black Hawks

1939—Boston Bruins  
1940—N. Y. Rangers  
1941—Boston Bruins  
1942—Toronto Maple Leafs  
1943—Detroit Red Wings  
1944—Montreal Canadiens  
1945—Toronto Maple Leafs  
1946—Montreal Canadiens  
1947—Toronto Maple Leafs  
1948—Toronto Maple Leafs  
1949—Toronto Maple Leafs  
1950—Detroit Red Wings  
1951—Toronto Maple Leafs  
1952—Detroit Red Wings  
1953—Montreal Canadiens

\* March.

† The Montreal Canadiens and Seattle, P.C.H.L. champions, had played five games at Seattle, Wash., when an influenza epidemic (which took the life of Joe Hall of the Canadiens) caused the Department of Health to stop the series. Each team won two games, with one contest ending in a tie.

### HOCKEY'S HALL OF FAME

Kingston, Ontario

Donald H. Bain  
Hobey Baker  
R. R. (Dickie) Boon  
Russell Bowie  
Aubrey Clapper  
Bill Cook  
Allan Davidson  
Chas. G. Drinkwater  
Charles Gardiner

Eddie Gerard  
Frank (Moose) Goheen  
Mike Grant  
Silas Griffith  
Ernest (Moose) Johnson  
Aurel Joliat  
E. C. (Newsy) Lalonde  
Duncan (Mickey) MacKay

Joe Malone  
Frank McGee  
Howie Morenz  
Frank Nighbor  
Frank Patrick  
Lester Patrick  
Tom Phillips  
Harvey Pulford

George Richardson  
Arthur H. Ross  
Eddie Shore  
Nelson (Nels) Stewart  
Hod Stuart  
Fred (Cyclone) Taylor  
Harry J. Trihey  
Georges Vezina

### Only Stanley Cup Sweep

In 1952 the Detroit Red Wings set a National Hockey League play-off record by

scoring an eight-game sweep to gain the Stanley Cup.

## BASKETBALL

**B**ASKETBALL may be unique in sports. It is one game concerning which it is safe to state when, where and how it originated. In the winter of 1891-92, Dr. James Naismith, an instructor in the Y.M.C.A. Training College (now Springfield College) at Springfield, Mass., deliberately invented the game of basketball in order to provide indoor exercise and competition for the students between the closing of the football season and the opening of the baseball season. He affixed peach baskets overhead on the walls at opposite ends of the gymnasium and, with an association (soccer) football, organized teams to play his new game in which the purpose was to toss the ball into one basket and prevent, as far as possible, the opponents from tossing the ball into the other basket. Fun-

damentally, the game is the same today, though there have been some improvements in equipment and many changes in the rules.

Because Dr. Naismith had eighteen available players when he invented the game, the first rule was: "There shall be nine players on each side." Later the number of players became optional, depending upon the size of the available court, but the five-player standard was adopted when the game spread over the country. United States soldiers introduced the game in Europe in World War I and, being taken up by foreign nations, it soon became a world-wide sport. An odd point is that, though it is still chiefly an indoor game in the United States, in other countries it flourishes almost entirely outdoors.

## National Collegiate A. A. Champions

1939—Oregon	1946—Oklahoma A & M
1940—Indiana	1947—Holy Cross
1941—Wisconsin	1948—Kentucky
1942—Stanford	1949—Kentucky
1943—Wyoming	1950—C.C.N.Y.
1944—Utah	1951—Kentucky
1945—Oklahoma A & M	1952—Kansas
	1953—Indiana

## Professional Champions

The National Basketball League, formed in 1937, merged with the Basketball Association of America in the summer of 1949. Play in the B. A. A. started in 1946, with teams in ten cities. The current National Basketball Association is the result of the merger. The champions follow:

## National League

1938—Goodyears
1939-40—Firestones
1941-42—Oshkosh
1943-45—Fort Wayne
1946—Rochester
1947—Chicago
1948—Minneapolis
1949—Anderson

## Association of America

1947—Philadelphia
1948—Baltimore
1949—Minneapolis

## National Association

1950—Minneapolis
1951—Rochester
1952—Minneapolis
1953—Minneapolis

## National Invitation Champions

(Madison Square Garden Tourney)

1938—Temple	1946—Kentucky
1939—Long Island U.	1947—Utah
1940—Colorado	1948—St. Louis
1941—Long Island U.	1949—San Francisco
1942—West Virginia	1950—C.C.N.Y.
1943—St. John's (Bklyn.)	1951—Brigham Young
1944—St. John's (Bklyn.)	1952—La Salle (Phila.)
1945—DePaul	1953—Seton Hall

## AMERICAN LEAGUE CHAMPIONS

1926—Cleveland Rosenblums
1927—Brooklyn Original Celtics
1928—Brooklyn Original Celtics
1929—Cleveland Rosenblums
1930—Cleveland Rosenblums
1931—Brooklyn Visitations
1932—No competition
1933—No competition
1934—Philadelphia Hebrews
1935—Brooklyn Visitations
1936—Philadelphia Hebrews
1937—Philadelphia Hebrews
1938—Jersey Reds
1939—New York Jewels
1940—Philadelphia Sphas
1941—Philadelphia Sphas
1942—Wilmington
1943—Philadelphia Sphas
1944—Wilmington Bombers
1945—Philadelphia Sphas
1946—Baltimore Bullets
1947—Trenton Tigers
1948—Wilkes-Barre Barons
1949—Wilkes-Barre Barons
1950—Scranton Miners
1951—Scranton Miners
1952—Wilkes-Barre Barons
1953—Manchester (Conn.) Colonels

## 1953-54 N. B. A. ALL-STAR SELECTIONS

(Selected by writers and broadcasters)

**FIRST TEAM**—Bob Cousy, Boston; Neil Johnston, Philadelphia; George Mikan, Minneapolis; Adolph Schayes, Syracuse;

Harry Gallatin, New York.

**SECOND TEAM**—Ed Macauley, Boston; Jim Pollard, Minneapolis; Carl Braun, New York; Bob Wanzer, Rochester; Paul Seymour, Syracuse.



## BOWLING

THE GAME of bowling that is the favorite sport of millions of "keglers" in the United States is an indoor development of the more ancient outdoor game that survives as lawn bowling. The outdoor game is prehistoric in origin and probably goes back to Primitive Man and round stones that were rolled at some target. It is believed that a game something like nine-pins was popular among the Dutch, Swiss and Germans as long ago as A.D. 1200 at which time the game was played outdoors with an alley consisting of a single plank 12 to 18 inches wide along which was rolled a ball toward three rows of three pins each placed at the far end of the alley. When the first indoor alleys were built and how the game was modified from time to time are matters of dispute. Much of the confusion arises from a lack of certainty as to which game is meant, "bowls" or "bowling", one with a "jack" and the other with "pins", in historical passages.

It is supposed that the early settlers of New Amsterdam (New York City) being Dutch, they brought their two bowling games with them. About a century ago the game of nine-pins was flourishing in the United States but so corrupted by gambling on matches that it was barred by law in New York and Connecticut. Since the law specifically barred "nine-pins", it was eventually evaded by adding another pin and thus legally making it a new game. The genius who thought up that simple method of outwitting the law and putting a popular game in motion once more remained modestly anonymous. With the increase in the number of pins, the old diamond formation of nine-pins was abandoned for the triangle set-up of ten-pins that remains the rule to this day. Various organizations were formed to make rules for bowling and supervise competition in the United States but none was successful until the American Bowling Congress, organized Sept. 9, 1895, became the ruling body.

### Bowling Statistics

Source: American Bowling Congress.

#### American Bowling Congress Tournament Records

Type of record	Holder and home city	Score	Year
High team total	Birk Bros., Chicago	3234	1938
High team game	Tea Shop, Milwaukee	1186	1927
High doubles total	Steve Nagy-John Klares, Cleveland	1453	1952
High doubles game	J. Gworek—H. Kmidowski, Buffalo	544	1946
High singles total	Lee Jougard, Detroit	775	1951
High all events total	Max Stein, Belleville, Ill.	2070	1937
High 3 games in any event	Lee Jougard, Detroit	775	1951

#### AMERICAN BOWLING CONGRESS CHAMPIONS

Year	Singles	Score	Doubles	Score
1931	Walter Lachowski, Erie, Pa.	712	E. Rafferty—C. Reilly, Philadelphia, Pa.	1316
1932	Otto Nitschke, Cleveland, Ohio	731	F. Benkovic—C. Daw, Milwaukee, Wis.	1358
1933	Earl Hewitt, Erie, Pa.	724	G. Zunker—F. Benkovic, Milwaukee, Wis.	1415
1934	Jerry Vidro, Grand Rapids, Mich.	721	R. Rudolph—J. Ryan, Waukegan, Ill.	1321
1935	Don Brokaw, Canton, Ohio	733	C. Summerix—H. Souers, Akron, Ohio	1348
1936	Charles Warren, Springfield, Ill.	735	A. Slanina—M. Straka, Chicago, Ill.	1347
1937	Gene Gagliardi, Mt. Vernon, N. Y.	749	V. Gibbs, Kansas City, Mo.—N. Burton, Dallas, Texas	1359
1938	Knute Anderson, Moline, Ill.	746	D. Johnson—F. Snyder, Indianapolis, Ind.	1337
1939	Jim Daneek, Forest Park, Ill.	730	P. Icuss—M. Fowler, Steubenville, Ohio	1405
1940	Ray Brown, Terre Haute, Ind.	742	H. Freitag—J. Sinke, Chicago, Ill.	1346
1941	Fred Ruff, Belleville, Ill.	745	W. Lee—R. Farness, Madison, Wis.	1346
1942	John Stanley, Cleveland, Ohio	756	E. Nowicki—G. Baier, Milwaukee, Wis.	1377
1946	Leo Rollick, Los Angeles, Calif.	737	J. Gworek—H. Kmidowski, Buffalo, N. Y.	1366
1947	Junie McMahon, Chicago	740	Ed Doerr, Jr.—Len Springmeyer, St. Louis	1350
1948	Lincoln Protich, Akron, Ohio	721	J. Towns—W. Sweeney, Chicago	1361
1949	Bernard Rusche, St. Bernard, Ohio	716	D. Van Boxel, Green Bay—E. Bernhardt, Sturgeon Bay	1332
1950	Everett Leins, Aurora, Ill.	757	W. Ebosh—E. Linsz, Cleveland	1325
1951	Lee Jougard, Detroit, Mich.	775	Bob Benson—Ed Marshall, Lansing, Mich.	1334
1952	Al Sharkey, Chicago	758	Steve Nagy-John Klares, Cleveland	1453
1953	Frank Santore, Long Island City, N. Y.	749	Eddie Koep—Joe Kissoff, Cleveland	1339

## American Bowling Congress Champions (cont.)

Year	All-events	Score	Team	Score
1931	Mike Mauser, Youngstown, Ohio.....	1966	S & L Motor, Chicago, Ill.....	3013
1932	Hugh Stewart, Cincinnati, Ohio.....	1980	Jefferson Clothiers, Dayton, Ohio.....	3108
1933	Gil Zunker, Milwaukee, Wis.....	2060	Flag Opticians, Covington, Ky.....	3021
1934	Walt Reppenhagen, Detroit, Mich.....	1972	Strohs, Detroit, Mich.....	3089
1935	Ora Mayer, San Francisco, Calif.....	2022	Wolfe Tire Service, Niagara Falls, N. Y.....	3029
1936	John Murphy, Indianapolis, Ind.....	2006	Falls City Hi-Bru, Indianapolis, Ind.....	3089
1937	Max Stein, Belleville, Ill.....	2070	Krakow Furniture, Detroit, Mich.....	3118
1938	Don Beatty, Jackson, Mich.....	1978	Birk Bros., Chicago, Ill.....	3234
1939	Joe Wilman, Chicago, Ill.....	2028	Fife Electric, Detroit, Mich.....	3151
1940	Fred Fisher, Buffalo, N. Y.....	2001	Monarch Beer, Chicago, Ill.....	3047
1941	Harold Kelly, South Bend, Ind.....	2013	Vogel Bros., Forest Park, Ill.....	3065
1942	Stan Moskal, Saginaw, Mich.....	1973	Budweiser, Chicago, Ill.....	3131
1946	Joe Wilman, Chicago, Ill.....	2054	Llo-da-mar Bowl, Santa Monica, Calif.....	3023
1947	Junie McMahon, Chicago.....	1965	Eddie and Earl Linsz, Cleveland, Ohio.....	3032
1948	Ned Day, West Allis, Wis.....	1979	Washington Shirts, Chicago.....	3007
1949	John Small, Chicago.....	1941	Jimmie Smith's, South Bend, Ind.....	3027
1950	Frank Santore, Long Island City, N. Y.....	1981	Pepsi-Cola, Detroit.....	2952
1951	Tony Lindeman, Detroit.....	2005	C. B. O'Malley Oldsmobile, Chicago.....	3070
1952	Steve Nagy, Cleveland, Ohio.....	2065	E & B Beer, Detroit, Mich.....	3115
1953	Frank Santore, Long Island City, N. Y.....	1994	Pfeiffer Beer, Detroit.....	3181

## WOMAN'S INTERNATIONAL BOWLING CONGRESS CHAMPIONS

Source: Emma Phaler, Secretary, Woman's International Bowling Congress, Inc.

Year	Singles	Score	Doubles	Score
1932	Audrey McVay, Kansas City, Mo.....	668	M. Frank—E. Kirg, Chicago.....	1218
1933	Mrs. Sally Twyford, Aurora, Ill.....	628	V Peters—M. Kite, Syracuse, N. Y.....	1135
1934	Marie Clemensen, Chicago.....	712	F. Trettin—D. McQuade, Chicago.....	1190
1935	Marie Warmbier, Chicago.....	652	E. Hauffer—B. Simon, San Antonio.....	1219
1936	Mrs. Ella Burmeister, Madison, Wis.....	612	Mrs. A. Lindermann—Mrs. L. Baldy, Milwaukee.....	1116
1937	Mrs. Anna Gottstine, Buffalo.....	647	L. Franke—G. Weber, Fort Wayne.....	1230
1938	Mrs. Rose Warner, Waukegan, Ill.....	622	F. Probert—E. Sablatnik, St. Louis.....	1215
1939	Helen Hengstler, Detroit.....	626	C. Powers—B. Reus, Grand Rapids.....	1130
1940	Mrs. Sally Twyford, Aurora, Ill.....	626	T. Morris—D. Burmeister Miller, Chicago.....	1181
1941	Nancy Huff, Los Angeles.....	662	J. Pittinger—M. J. Hogan, Los Angeles.....	1155
1942	Tillie Taylor, Newark, N. J.....	659	S. Hartrick—C. Allen, Detroit.....	1204
1946	Val Mikiel, Detroit.....	682	V. Focazio—P. Dusher, Niagara Falls, N. Y.....	1251
1947	Agnes Junker, Indianapolis, Ind.....	650	Candice Miller—E. Beard, Ft. Wayne, Ind.....	1245
1948	Shirlee Wernecke, Chicago.....	696	M. Cass, Alhambra—M. Mathews, Long Beach, Calif.....	1188
1949	Clara Mataya, St. Louis.....	658	Ann Elyasevich—Estelle Svoboda, Chicago.....	1229
1950	Cleo Stalkamp, Newport, Ky.....	669	Shirley Gantenbein—Flo Schick, Dallas.....	1216
1951	Ida Simpson, Buffalo, N. Y.....	639	Esther Cook—Alma Denini, Seattle.....	1179
1952	Lorene Craig, Kansas City, Mo.....	672	Lorraine Quam—Martha Hoffman, Madison, Wis.....	1206
1953	Marge Baginski, Berwyn, Ill.....	637	Doris Knechtges—Jane Grudzien, Detroit.....	1211

Year	All-events	Score	Team	Score
1932	Marie Warmbier, Chicago.....	1807	Martin Breit Realtors, St. Louis.....	2667
1933	Mrs. Sally Twyford, Aurora, Ill.....	1765	Alberti Jewelers, Chicago.....	2864
1934	Mrs. Esther Ryan, Milwaukee.....	1763	Tommy Dolls Five, Cincinnati.....	2616
1935	Marie Warmbier, Chicago.....	1911	Alberti Jewelers, Chicago.....	2765
1936	Mrs. Ella Burmeister, Madison, Wis.....	1683	Easty Five, Cleveland.....	2617
1937	Mrs. Louise Stockdale, Detroit.....	1761	The Heil Uniform Heat, Milwaukee.....	2685
1938	Dorothy Burmeister, Chicago.....	1843	The Heil Uniform Heat, Milwaukee.....	2706
1939	Ruth Troy, Dayton, Ohio.....	1724	Kornitz Pure Oil, Milwaukee.....	2618
1940	Mrs. Tess Morris, Chicago.....	1777	Logan Square Buicks, Chicago.....	2689
1941	Mrs. Sally Twyford, Aurora, Ill.....	1799	Rovick Bowling Shoes, Chicago.....	2661
1942	Nina Van Camp, Chicago.....	1888	Logan Square Buicks, Chicago.....	2815
1946	Catherine Fellmeth, Chicago.....	1835	Silver Seal Soda, St. Louis.....	2721
1947	Marge Dardeen, Cincinnati.....	1826	Kornitz Pure Oil, Milwaukee.....	2987
1948	Virgie Hupfer, Burlington, Iowa.....	1850	Kathryn Creme Pact, Chicago.....	2812
1949	Cecelia Winandy, Chicago.....	1840	Gears by Enterprise, Detroit.....	2786
1950	Marion Ladewig, Grand Rapids, Mich.....	1796	Fanitorium Majors, Grand Rapids, Mich.....	2903
1951	LaVerne Haverley, Los Angeles.....	1788	Hickman Oldsmobile Whirlaway, Indianapolis.....	2705
1952	Mrs. Virginia Turner, Gardena, Calif.....	1854	Cole Furniture, Cleveland.....	2854
1953	Doris Knechtges, Detroit.....	1886	B. & B. Chevrolet, Detroit.....	2931

## DUCK PINS

Source: A. L. Ebersole, Executive Secretary, National Duck Pin Bowling Congress.

### WORLD RECORDS (MEN)

Individual	Score
Event and record holder	
Single game—Eddie Funaro, New Haven, Conn.	239
3-game set—Arthur Lemke, Lowell, Mass.	542
4-game set—John Miller-Nova Hamilton, Baltimore (tie)	610
5-game set—William Brozey, Baltimore	785
6-game set—Andy Friar, Fall River, Mass.	914
7-game set—Howard Parsons, Washington, D. C.	1,091
8-game set—John Gaise, Baltimore	1,179
9-game set—Mike Litrenta, Baltimore	1,339
10-game set—Winnie Guerke, Baltimore	1,482
Season average—Nick Tronsky, New Britain, Conn.	134-14

### Doubles

Single game—W. Christiano-J. Silk, Norwalk, Conn.	352
3-game set—M. Avon-F. Jarman, Washington, D. C.	929
4-game set—Dawson Snyder-James Rosenberger, Baltimore	1,122
5-game set—Andy Page-Gene Sirbaugh, Atlanta, Ga.	1,428
6-game set—N. Hamilton-W. Guerke, Baltimore	1,624
7-game set—S. Witkowski, Middletown, Conn.-J. Genovesi, Rockville, Conn.	1,938
8-game set—E. Campbell-L. Seim, Annapolis, Md.	2,128
9-game set—N. Hamilton-W. Guerke, Baltimore	2,431
10-game set—J. Dietsch-J. Weinkam, Baltimore	2,752
Season average—H. Hipsley-J. Dietsch, Baltimore	254-10

### Teams

Single game—Winchester Packard, Washington, D. C.	797
3-game set—Hick's Cafe, Baltimore	2,123
5-game set—Kelly Bulck, Baltimore	3,348
10-game set—Park Circle Motor, Baltimore	6,460
15-game set—Popular Club-Recreation, Baltimore	9,420
Consecutive wins—Franks Tavern, Washington, D. C.	33
Season average—National Beer, Baltimore	638-42
3-man game—Middletown (Conn.) All-Stars	475
3-man set—Hugely's Bethesda (Md.) Stars	1,249
3-man 5-game set—C. Hildebrand, E. Pickus, N. Hamilton, Baltimore	1,957

## SKIING

### Long Jumps (Official American)

Year	Made by and place	Distance, in feet
1905	Gustave Bye, Red Wing, Minn.	106
1908	John Evenson, Ishpeming, Mich.	122
1910	August Nordby, Ishpeming, Mich.	140
1913	Lars Haugen, Steamboat Springs, Colo.	185
1917	Henry Hall, Steamboat Springs, Colo.	203
1919	Lars Haugen, Steamboat Springs, Colo.	214
1932	Hans Beck, Lake Placid, N. Y.	235
1934	John Elvrum, Big Pines, Calif.	240
1937	Alf Engen, Salt Lake City, Utah.	242
1939	Alf Engen, Big Pines, Calif.	251
1939	Bob Roecker, Iron Mountain, Mich.	257
1941	Alf Engen, Iron Mountain, Mich.	267
1941	Torger Tokle, Leavenworth, Wash.	273
1941	Torger Tokle, Olympian Hill, Hyak, Wash.	288
1942	Torger Tokle, Iron Mountain, Mich.	289
1949	Joe Perrault, Iron Mountain, Mich.	297
1950	Gordon Wren, Steamboat Springs, Colo.	297
1950	Billy Olson, Iron Mountain, Mich.	297
1951	Ansten Samuelstuen, Steamboat Springs	316

### WORLD RECORDS (WOMEN)

Individual	Score
Event and record holder	
Single game—Vivian Walsh, Washington	232
3-game set—Minerva Weisenborn, Baltimore	471
4-game set—Mrs. Ellen Holland, Norfolk, Va.	561
5-game set—Elizabeth Barger, Baltimore, Md.	745
6-game set—Ida Simmons, Norfolk, Va., and Joan Nuessele, Baltimore (tie)	835
7-game set—Ida Simmons Slack, Norfolk, Va.	992
8-game set—Elizabeth Barger, Baltimore	1,020
9-game set—Maxine Allen, Durham, N. C.	1,231
10-game set—Ida Simmons, Norfolk, Va.	1,355
Season average—Ida Simmons Slack	124-15

### Doubles

Single game—Hazel Wells-Ruby Hovanic, Bridgeport, Conn.	338
3-game set—A. Levy-D. Smith, Norfolk, Va.	798
4-game set—E. Brose-T. McDonough, Baltimore	966
5-game set—E. Barger-E. Dize, Baltimore	1,298
6-game set—I. Simmons-E. Leib, Baltimore	1,458
7-game set—E. Traber-M. Cleaveland, Atlanta, Ga.	1,694
8-game set—T. McDonough-E. Brose, Baltimore	1,905
9-game set—I. Simmons-E. Leib, Baltimore	2,139
10-game set—E. Barger-E. Dize, Baltimore	2,572
Season average—N. Zimmerman-M. Tuckey, Baltimore	217

### Teams

Single game—Devon All-Star Girls, Devon, Conn.	721
3-game set—Star Laundry Girls, Norwalk, Conn.	1,965
5-game set—Lucky Strike Girls, Portsmouth, Va.	3,017
10-game set—Evening Star Champions, Washington, D. C.	5,438
Season average—Aristocrat Dairy, Baltimore	578-0
Consecutive wins—Bookies, Richmond, Va.	37
3-woman 7-game set—I. Simmons, J. White, E. Leib, Baltimore	2,433

## 1954 Y. M. C. A. CHAMPIONS

Source: Harold T. Friermood, Secretary, Health and Physical Education, National Council of the Y.M.C.A.'s.

Basketball—Leigh Street Branch, Richmond, Va.  
Swimming (indoor)—Brooklyn Central  
Weightlifting—Northern Branch, Detroit  
Wrestling—Baltimore and Wilkes-Barre, Pa. (tie)

### GYMNASTICS

Individual all-around—Abe Grossfield, West Side  
Team—West Side, New York

### VOLLEYBALL

Senior—Stockton, Calif.  
Veterans—Long Beach, Calif.

### FOUR-WALL HANDBALL

Senior singles—Gus Lewis, Division St. Dept., Chicago  
Senior doubles—Jack Gordon-John Sloan, Irving Park, Chicago  
Junior singles—Morey Nerenberg, Downtown, St. Paul, Minn.  
Junior doubles—Donald Sands-Steve Subak, Central, Minneapolis

## BOYS' ATHLETIC ACHIEVEMENT

Individual—Mark Swartz, York, Pa.  
Team—York, Pa.



## FENCING

Source: Amateur Fencers League of America.

## NATIONAL CHAMPIONS

Year	Foil	Épée	Saber	Women's foil
1892	W. S. O'Connor	B. F. O'Connor	R. O. Haubold	
1893	W. T. Heintz	G. M. Hammond	G. M. Hammond	
1894	C. G. Bothner	R. O. Haubold	G. M. Hammond	
1895	A. V. Z. Post	C. G. Bothner	C. G. Bothner	
1896	G. Kavanaugh	A. V. Z. Post	C. G. Bothner	
1897	C. G. Bothner	C. G. Bothner	C. G. Bothner	
1898	No competition			
1899	G. Kavanaugh	M. Diaz	G. Kavanaugh	
1900	F. Townsend	W. D. Lyon	J. L. Erving	
1901	C. Tatham	C. Tatham	A. V. Z. Post	
1902	J. P. Parker	C. Tatham	A. V. Z. Post	
1903	F. Townsend	C. Tatham	A. V. Z. Post	
1904	C. G. Bothner	C. G. Bothner	A. G. Anderson	
1905	C. G. Bothner	W. S. O'Connor	K. B. Johnson	
1906	S. D. Breckinridge	W. Grebe	A. G. Anderson	
1907	C. Waldbott	W. D. Lyon	A. G. Anderson	
1908	W. L. Bowman	P. Benzenberg	G. W. Postgate	
1909	O. A. Dickinson	A. De La Poer	A. E. Sauer	
1910	G. K. Bainbridge	A. De La Poer	J. T. Shaw	
1911	G. H. Breed	G. H. Breed	A. G. Anderson	
1912	S. Hall	A. V. Z. Post	C. A. Bill	A. Baylis
1913	P. J. Meylan	A. E. Sauer	A. G. Anderson	Mrs. W. H. Dewar
1914	S. D. Breckinridge	F. W. Allen	W. Von Blijenburgh	M. Stimson
1915	O. A. Dickinson	J. A. MacLaughlin	S. Hall	J. Pyle
1916	A. E. Sauer	W. H. Russell	S. Hall	Mrs. C. H. Woorhees
1917	S. Hall	L. G. Nunes	A. S. Lyon	F. Walton
1918	No competition			
1919	S. Hall	W. H. Russell	A. S. Lyon	No competition
1920	S. Hall	R. W. Dutcher	S. Hall	A. Gehrig
1921	F. W. Honeycutt	C. R. McPherson	C. R. McPherson	A. Gehrig
1922	H. M. Raynor	L. G. Nunes	L. G. Nunes	A. Gehrig
1923	R. Peroy	G. C. Calnan	L. M. Schoonmaker	A. Gehrig
1924	L. G. Nunes	L. G. Nunes	J. E. Gignoux	Mrs. C. H. Hopper
1925	G. C. Calnan	W. H. Russell	J. Vince	Mrs. L. M. Schoonmaker
1926	G. C. Calnan	L. G. Nunes	L. G. Nunes	Mrs. L. M. Schoonmaker
1927	G. C. Calnan	H. Van Buskirk	N. Muray	S. Stern
1928	G. C. Calnan	L. G. Nunes	N. Muray	M. Lloyd
1929	J. L. Lewis	F. S. Righeimer	L. G. Nunes	Mrs. L. M. Schoonmaker
1930	G. C. Calnan	M. Pasche	N. C. Armitage	Mrs. H. Van Buskirk
1931	G. C. Calnan	M. A. de Capriles	J. R. Huffman	M. Lloyd
1932	J. L. Lewis	L. G. Nunes	J. R. Huffman	D. Locke
1933	J. L. Lewis	G. M. Heiss	J. R. Huffman	D. Locke
1934	H. V. Alessandrini	G. M. Heiss	N. C. Armitage	H. Mayer
1935	J. L. Lewis	T. J. Sands	N. C. Armitage	H. Mayer
1936	H. V. Alessandrini	G. M. Heiss	N. C. Armitage	Mrs. J. de Tuscan
1937	J. L. Lewis	T. J. Sands	J. R. Huffman	H. Mayer
1938	D. Every	J. R. de Capriles	J. R. Huffman	H. Mayer
1939	N. Lewis	L. Tingley	N. C. Armitage	H. Mayer
1940	D. Every	F. Seibert	N. C. Armitage	H. Mroczkowska
1941	D. Cetrulo	G. M. Heiss	N. C. Armitage	H. Mayer
1942	W. Dow	H. Santos	N. C. Armitage	H. Mayer
1943	W. Dow	R. Driscoll	N. C. Armitage	H. Mroczkowska
1944	A. Snyder	M. A. de Capriles	T. Nyilas	M. Dalton
1945	D. Every	M. Gilman	N. C. Armitage	M. Cerra
1946	J. R. de Capriles	A. Wolff	T. Nyilas	H. Mayer
1947	Dean Cetrulo	James Strauch	James Flynn	Mrs. Helena Dow
1948	Nathaniel Lubell	Norman Lewis	Dean Cetrulo	Mrs. Helena Dow
1949	Daniel Bukantz	Norman Lewis	Umberto Martino	Polly Craus
1950	Silvio Giolito	Norman Lewis	Tibor Nyilas	Janice-Lee York
1951	Silvio Giolito	J. R. de Capriles	Tibor Nyilas	Janice-Lee York
1952	Daniel Bukantz	Abelardo Menendez	Tibor Nyilas	Mrs. Maxine Mitchell
1953	Daniel Bukantz	Donald Thompson	Tibor Nyilas	Paula Sweeney

## ICE (FIGURE) SKATING

Source: Art Goodfellow, Editor, *World Ice Skating Guide*, 1420 Sixth Ave., New York 19, N. Y.

## WORLD CHAMPIONS

Year	Men	Women
1896	Gilbert Fuchs, Germany	
1897	Gustav Hugel, Austria	
1898	H. Grenander, Sweden	
1899	Gustav Hugel, Austria	
1900	Gustav Hugel, Austria	
1901	Ulrich Salchow, Sweden	
1902	Ulrich Salchow, Sweden	
1903	Ulrich Salchow, Sweden	
1904	Ulrich Salchow, Sweden	
1905	Ulrich Salchow, Sweden	
1906	Gilbert Fuchs, Germany	Madge Syers, England
1907	Ulrich Salchow, Sweden	Madge Syers, England
1908	Ulrich Salchow, Sweden	Lily Kronberger, Hungary
1909	Ulrich Salchow, Sweden	Lily Kronberger, Hungary
1910	Ulrich Salchow, Sweden	Lily Kronberger, Hungary
1911	Ulrich Salchow, Sweden	Lily Kronberger, Hungary
1912	Fritz Kachler, Austria	Meray Horvath, Hungary
1913	Fritz Kachler, Austria	Meray Horvath, Hungary
1914	Gosta Sandahl, Sweden	Meray Horvath, Hungary
1915-21	No competition	No competition
1922	Gillis Grafstrom, Sweden	Mrs. Szabo Plank, Austria
1923	Fritz Kachler, Austria	Mrs. Szabo Plank, Austria
1924	Gillis Grafstrom, Sweden	Mrs. Szabo Plank, Austria
1925	Willi Boeckl, Austria	Mrs. Szabo Plank, Austria
1926	Willi Boeckl, Austria	Mrs. Szabo Plank, Austria
1927	Willi Boeckl, Austria	Sonja Henie, Norway
1928	Willi Boeckl, Austria	Sonja Henie, Norway
1929	Gillis Grafstrom, Sweden	Sonja Henie, Norway
1930	Karl Schafer, Austria	Sonja Henie, Norway
1931	Karl Schafer, Austria	Sonja Henie, Norway
1932	Karl Schafer, Austria	Sonja Henie, Norway
1933	Karl Schafer, Austria	Sonja Henie, Norway
1934	Karl Schafer, Austria	Sonja Henie, Norway
1935	Karl Schafer, Austria	Sonja Henie, Norway
1936	Karl Schafer, Austria	Sonja Henie, Norway
1937	Felix Kaspar, Austria	Cecilia Colledge, England
1938	Felix Kaspar, Austria	Megan Taylor, England
1939	Graham Sharp, England	Megan Taylor, England
1940-46	No competition	No competition
1947	Hans Gerschweiler, Switzerland	Barbara A. Scott, Canada
1948	Richard Button, U. S.	Barbara A. Scott, Canada
1949	Richard Button, United States	Aja Vrzanova, Czechoslovakia
1950	Richard Button, U. S.	Aja Vrzanova, Czech.
1951	Richard Button, United States	Jeannette Altwegg, England
1952	Richard Button, U. S.	Jacqueline du Bief, France
1953	Hayes A. Jenkins, U. S.	Tenley Albright, U. S.

## 1954 CHAMPIONSHIPS

## World

(At Oslo, Norway, Feb. 16-19)

Men—Hayes Alan Jenkins, United States  
 Women—Gundi Busch, Germany  
 Pairs—Frances Dafeo-Norris Bowden, Canada  
 Dance—Jean T. Westwood-Lawrence Demmy, Great Britain

## European

(At Bolzano, Italy, Jan. 29-31)

Men—Carlo Fassi, Italy  
 Women—Gundi Busch, Germany  
 Pairs—Silvia and Michel Grandjean, Switzerland  
 Dance—Jean T. Westwood-Lawrence Demmy, Great Britain

## UNITED STATES CHAMPIONS

Year	Men	Women
1914	Norman Scott	Theresa Weld
1915-17	No competition	No competition
1918	Nathaniel Niles	Mrs. R. S. Beresford
1919	No competition	No competition
1920	Sherwin Badger	Theresa Weld
1921	Sherwin Badger	Theresa Blanchard
1922	Sherwin Badger	Theresa Blanchard
1923	Sherwin Badger	Theresa Blanchard
1924	Sherwin Badger	Theresa Blanchard
1925	Nathaniel Niles	Beatrice Loughran
1926	C. I. Christenson	Beatrice Loughran
1927	Nathaniel Niles	Beatrice Loughran
1928	Roger Turner	Maribel Y. Vinson
1929	Roger Turner	Maribel Y. Vinson
1930	Roger Turner	Maribel Y. Vinson
1931	Roger Turner	Maribel Y. Vinson
1932	Roger Turner	Maribel Y. Vinson
1933	Roger Turner	Maribel Y. Vinson
1934	Roger Turner	Suzanne Davis
1935	Robin Lee	Maribel Y. Vinson
1936	Robin Lee	Maribel Y. Vinson
1937	Robin Lee	Maribel Y. Vinson
1938	Robin Lee	Joan Tozzer
1939	Robin Lee	Joan Tozzer
1940	Eugene Turner	Joan Tozzer
1941	Eugene Turner	Jane Vaughn
1942	Bobby Specht	Jane V. Sullivan
1943	Arthur R. Vaughn, Jr.	Gretchen Merrill
1944	Omitted	Gretchen Merrill
1945	Omitted	Gretchen Merrill
1946	Richard Button	Gretchen Merrill
1947	Richard Button	Gretchen Merrill
1948	Richard Button	Gretchen Merrill
1949	Richard Button	Yvonne Sherman
1950	Richard Button	Yvonne Sherman
1951	Richard Button	Sonya Klopfer
1952	Richard Button	Tenley Albright
1953	Hayes A. Jenkins	Tenley Albright

## 1954 U. S. Championships

(At Los Angeles, March 18-20)

## SENIOR

Men—Hayes Alan Jenkins, Colorado Springs, Colo.  
 Women—Tenley Albright, Newton Center, Mass.  
 Pairs—Carole Ann Ormaca-Robin Greiner, Fresno, Calif.  
 Gold Dance—Carmel and Edward Bodel, Berkeley, Calif.  
 Silver Dance—Sidney Ann Foster, Fargo, N. D.-Franklin Nelson, Tulsa, Okla.

## JUNIOR

Men—Tim Brown, Glendora, Calif.  
 Women—Catherine Machado, Los Angeles  
 Pairs—Dawn May-David Hertz, Seattle

## NOVICE

Men—Robert Lee Brewer, Alhambra, Calif.  
 Women—Patricia Kilgore, Compton, Calif.

## Canadian

(At Calgary, Alberta, March 11-13)

Men—Charles Snelling, Toronto  
 Women—Barbara Gratton, Toronto  
 Pairs—Frances Dafeo-Norris Bowden, Toronto  
 Dance—Doreen Leech-Norman Walker, Vancouver, B. C.

## ICE (SPEED) SKATING

## WORLD RECORDS

Source: International Skating Union (I.S.U.).

## MEN

Meters	Time	Recordholder and country	Where made	Date
500.....	0:40.9.....	Jurij Sergeev, U.S.S.R.....	Alma Ata, U.S.S.R.....	Jan. 25, 1953
1,000.....	1:28.4.....	Clas Thunberg, Finland.....	Davos, Switz.....	Jan. 11, 1930
1,500.....	2:12.9.....	Valentin Chaikin, U.S.S.R.....	Alma Ata, U.S.S.R.....	Jan. 20, 1952
3,000.....	4:40.2.....	Anton Huiskes, Holland.....	Davos, Switz.....	Jan. 24, 1953
5,000.....	8:06.6.....	Kees Broekman, Holland.....	Davos, Switz.....	Jan. 25, 1953
10,000.....	16:32.6.....	Hjalmar Andersen, Norway.....	Hamar, Norway.....	Feb. 10, 1952
All-around.....	188.958 pts.....	Sverre Farstad, Norway.....	Davos, Switz.....	Feb. 5-6, 1949

## WOMEN

500.....	0:46.4.....	Laila Schou-Nilsen, Norway.....	Davos, Switz.....	Jan. 30, 1937
1,000.....	1:36.4.....	Lidia Selichowa, U.S.S.R.....	Alma Ata, U.S.S.R.....	Jan. 30, 1953
1,500.....	2:25.5.....	Khalida Schegolewa, U.S.S.R.....	Alma Ata, U.S.S.R.....	Jan. 30, 1953
3,000.....	5:13.8.....	Rimma Zhukowa, U.S.S.R.....	Alma Ata, U.S.S.R.....	Jan. 23, 1953
5,000.....	9:01.6.....	Rimma Zhukowa, U.S.S.R.....	Alma Ata, U.S.S.R.....	Jan. 24, 1953
All-around.....	204.010 pts.....	Rimma Zhukowa, U.S.S.R.....	Alma Ata, U.S.S.R.....	Jan. 23-24, 1953

## NATIONAL SENIOR AMATEUR RECORDS

(Made in competition)

Source: Amateur Skating Union of the United States.

## MEN'S OUTDOOR

Event	Time	Holder	Place	Date
220 yd...	18.1	Robert Fitzgerald...	Minneapolis...	1/10/43
440 yd...	35.4	Charles Gorman...	Lake Placid...	2/14/27
	35.4	Ken Bartholomew...	St. Paul...	1/25/42
	35.4	Robert Fitzgerald...	Minneapolis...	2/15/42
880 yd...	1:14.2	Robert Fitzgerald...	Minneapolis...	1/7/45
¼ mi...	1:55.8	Clas Thunberg...	Saranac Lake...	2/15/26
1 mi...	2:38.2	Clas Thunberg...	Lake Placid...	2/12/26
* 1 mi...	2:29.7	Del Lamb...	Oslo...	2/19/48
2 mi...	5:33.8	Eddie Schroeder...	Minneapolis...	1/30/34
3 mi...	8:19.6	Ross Robinson...	Lake Placid...	2/14/30
5 mi...	14:30.4	Ross Robinson...	Lake Placid...	2/12/27

\* Made on 400-meter track in Norway.

## MEN'S INDOOR

## FOR TRACKS 12 LAPS AND UNDER

Event	Time	Holder	Place	Date
220 yd...	18	F. Robson...	Boston...	1/13/11
¼ mi...	23.8	C. Gorman...	St. John*	3/1/27
440 yd...	36.8	C. Gorman...	St. John...	2/27/25
880 yd...	1:15.6	B. O'Sickey...	Pittsburgh...	3/1/16
¼ mi...	2:00.4	P. Johnston...	Cleveland...	3/2/28
1 mi...	2:41.2	Morris Wood-		
		F. Robson...	Pittsburgh...	2/13/04
1½ mi...	4:25	Edmund Lamy...	Cleveland...	1/27/10
2 mi...	5:54.8	R. Heckenbach...	St. Paul...	1/30/37
3 mi...	8:58.8	P. Johnston...	Pittsburgh...	2/19/27
4 mi...	13:41.8	Joe Moore...	Brooklyn...	2/7/27
5 mi...	15:42.2	F. Stack...	Chicago...	2/8/30

\* New Brunswick, Canada.

## WOMEN'S OUTDOOR

220 yd...	20.2	Maddy Horn...	Saranac Lake...	2/11/39
440 yd...	39.4	L. Neitzel...	Minneapolis...	2/23/29
880 yd...	1:25.9	Maddy Horn...	Escanaba*	1/13/40
¼ mi...	2:17	Dot Franey...	Minneapolis...	1/16/37
1 mi...	3:06.1	Maddy Horn...	Oconomowoc†	1/24/37

\* Michigan. † Wisconsin.

## FOR TRACKS 13 LAPS AND OVER

440 yd...	39	Robert Olson...	Edmonton	4/23-25/43
880 yd...	1:21.7	T. G. Hutchinson...	Colo. Springs	4/23/49
¼ mi...	2:06.2	E. Babayan...	Colo. Springs	2/18/50
1 mi...	2:49.5	Edgar Dame...	Edmonton	4/23-25/53
2 mi...	6:02.3	Edgar Dame...	E. Lansing	3/28-29/52

## Browne Retains Crown

Terry Browne, Detroit ice skating star, again won the world barrel-jumping championship at the Grossinger (N. Y.) Country Club ice rink in 1954. He clinched the title with a leap of 25 feet 11 inches over 14 barrels. Ronald Herrera of Chicago was second. He also cleared 14 barrels, but his distance was only 25 feet 6 inches. Aldrina Lebel of Lake Placid, N. Y., won the women's competition, held for the first time, with a jump of 15 feet 2 inches. She hurdled seven barrels.

## WOMEN'S INDOOR

## FOR TRACKS 12 LAPS AND UNDER

220 yd...	21.6	Dot Franey...	St. Paul...	2/15/36
¼ mi...	31.0	Dot Franey...	St. Louis...	2/25/33
440 yd...	41.6	Dot Franey...	St. Paul...	2/16/36
880 yd...	1:27	Leila B. Potter...	Pittsburgh...	3/6/26
¼ mi...	2:18.1	Kit Klein...	Chicago...	2/2/35
1 mi...	3:15.6	Maddy Horn...	Chicago...	4/1/38

## FOR TRACKS 13 LAPS AND OVER

440 yd...	42	B. M. DeSchepper...	Edmonton	4/23-25/53
¼ mi...	1:32.3	J. Bachman...	E. Lansing	3/28-29/52
¾ mi...	2:25.2	J. Bachman...	E. Lansing	3/28-29/52
1 mi...	3:07.2	Pat Underhill...	Edmonton	4/23-25/53



## SOCCKER

Source: Flannery News Bureau of New York.

### National Challenge Cup Winners

Emblematic of United States  
Championship.

(Senior amateur and professional elevens eligible for  
tournaments.)

- 1914 Brooklyn (N. Y.) Field Club
- 1915 Bethlehem (Pa.) Steel Co. F. C.
- 1916 Bethlehem (Pa.) Steel Co. F. C.
- 1917 Fall River (Mass.) Rovers
- 1918 Bethlehem (Pa.) Steel Co. F. C.
- 1919 Bethlehem (Pa.) Steel Co. F. C.
- 1920 Ben Miller F. C., St. Louis, Mo.
- 1921 Robins Dry Dock F. C., Brooklyn, N. Y.
- 1922 Scullin Steel F. C., St. Louis, Mo.
- 1923 Paterson (N. J.) F. C.
- 1924 Fall River (Mass.) F. C.
- 1925 Shawsheen S. C., Andover, Mass.
- 1926 Bethlehem (Pa.) Steel Co. F. C.
- 1927 Fall River (Mass.) F. C.
- 1928 New York Nationals S. C.
- 1929 Hakoah All-Stars, New York
- 1930 Fall River (Mass.) F. C.
- 1931 Fall River (Mass.) F. C.
- 1932 New Bedford (Mass.) F. C.
- 1933 Stix, Baer & Fuller F. C., St. Louis, Mo.
- 1934 Stix, Baer & Fuller F. C., St. Louis, Mo.
- 1935 Central Breweries S. C., St. Louis, Mo.
- 1936 First German American S. C., Philadelphia
- 1937 New York Americans S. C.
- 1938 Sparta A. B. A., Chicago, Ill.
- 1939 St. Mary's Celtic S. C., New York
- 1940 No official champion\*
- 1941 Pawtucket (R. I.) F. C.
- 1942 Gallatin S. C., Pittsburgh
- 1943 Brooklyn (N. Y.) Hispano S. C.
- 1944 Brooklyn (N. Y.) Hispano S. C.
- 1945 Brookhattan S. C., New York
- 1946 Vikings, Chicago
- 1947 Ponta Delgada F. C., Fall River, Mass.
- 1948 Joe Simpkins S. C., St. Louis, Mo.
- 1949 Morgan (Pa.) S. C.
- 1950 Joe Simpkins S. C., St. Louis, Mo.
- 1951 German-Hungarian S. C., New York
- 1952 Harmarville (Pa.) S. C.
- 1953 Chicago Falcons

\* Finalists: Baltimore (Md.) S. C. and Sparta A. B. A., Chicago, Ill.

### Peters Lowers Marathon Mark

Jim Peters, British marathon runner, bettered his unofficial world record for the 26-mile 385-yard grind when he ran the distance in 2 hours 17 minutes 39.4 seconds at London on June 26, 1954. Peters' previous mark was 2:18:40.2. In the 1954 British Empire Games marathon, Peters was well on his way to a new record when he collapsed about 200 yards from the finish. James McGhee of Scotland won the race in 2:39:36.

### National Amateur Challenge Cup Winners

- 1923 No official champion\*
- 1924 Fleisher Yarn F. C., Philadelphia
- 1925 Toledo (Ohio) F. C.
- 1926 Defenders F. C., New Bedford, Mass.
- 1927 Heidelberg (Pa.) F. C.
- 1928 No official champion†
- 1929 Heidelberg (Pa.) F. C.
- 1930 Raffles F. C., Fall River, Mass.
- 1931 Goodyear F. C., Akron, Ohio
- 1932 Shamrock S. C., Cleveland, Ohio
- 1933 German American S. C., Philadelphia
- 1934 German American S. C., Philadelphia
- 1935 W. W. Riehl S. C., Castle Shannon, Pa.
- 1936 First German S. C., Brooklyn, N. Y.
- 1937 Highlander F. C., Trenton, N. J.
- 1938 Ponta Delgada F. C., Fall River, Mass.
- 1939 St. Michael's A. C., Fall River, Mass.
- 1940 Morgan-Strasser S. C., Morgan, Pa.
- 1941 Fall River (Mass.) S. C.
- 1942 Fall River (Mass.) S. C.
- 1943 Morgan-Strasser S. C., Morgan, Pa.
- 1944 Eintracht S. C., New York
- 1945 Eintracht S. C., New York
- 1946 Ponta Delgada F. C., Fall River, Mass.
- 1947 Ponta Delgada F. C., Fall River, Mass.
- 1948 Ponta Delgada F. C., Fall River, Mass.
- 1949 Elizabeth (N. J.) Sport Club
- 1950 Ponta Delgada F. C., Fall River, Mass.
- 1951 German-Hungarian S. C., New York
- 1952 St. Louis Raiders
- 1953 Ponta Delgada, Fall River, Mass.

\* Medals to semifinalists: Fleisher Yarn F. C., Philadelphia; Roxbury (Mass.) F. C.; Jeannette (Pa.) F. C.; Swedish American A. A., Chicago, Ill. † Finalists: Powers-Hudson-Exsex F. C., Fall River, Mass.; and Swedish American A. C., Detroit, Mich.

### BRITISH SOCCER CHAMPIONS

Source: Jim Kelly, 2889 Bainbridge Ave., New York 58, N. Y.

International—England

#### English

League (Division I)—Wolverhampton Wanderers  
League (Division II)—Leicester City  
League (Division III, South)—Ipswich Town  
League (Division III, North)—Port Vale  
Cup—West Bromwich Albion

#### Scottish

League (Division "A")—Glasgow Celtic  
League (Division "B")—Motherwell  
Cup—Glasgow Celtic

#### Welsh

League (Division I, South)—Pembroke Borough  
League (Division I, North)—55th R. A. Tonfanau  
Cup—Flint Town United

#### Irish

League—Linfield

Cup—Derry City

# DOG SHOWS

Source: The American Kennel Club.

## Morris and Essex Kennel Club Exhibition

Year	Best in show	Breed	Owner
1927	Ch. Higgins' Red Pat.	Irish setter	William W. Higgins
1928	Ch. Delf Discriminate of Pinegrade.	Sealyham terrier	Pinegrade Kennels
1929	Ch. Little Emir	Pomeranian	Mrs. V. Matta
1930	Ch. Weltona Frizzette of Wildoaks	Fox terrier, wire	Mr. and Mrs. R. C. Bondy
1931	Ch. Fionne v Loheland of Walnut Hall	Great dane	Harkness Edwards
1932	Ch. Lone Eagle of Earlsmoor	Fox terrier, wire	Dr. and Mrs. S. Milbank
1933	Eppingeville of Blarney	Fox terrier, wire	John G. Bates
1934	Ch. Gunside Babs of Hollybourne	Sealyham terrier	S. L. Froelich
1935	Ch. Milson O'Boy	Irish setter	Mrs. Cheever Porter
1936	Ch. Mr. Reynal's Monarch	Harrier	Amory L. Haskell
1937	Ch. Sturdy Max	English setter	Maridor Kennels
1938	Ch. Ideal Weather	Old English sheep dog	Leonard Collins
1939	Ch. My Own Brucie	Cocker spaniel	H. E. Mellenthin
1940	Ch. Blakeen Jung Frau	Poodle, standard	Blakeen Kennels
1941	Ch. Nornay Saddler	Fox terrier, smooth	Wissaboo Kennels
1946	Ch. Benbow's Beau	Cocker spaniel	Robert A. Gusman
1947	Rock Ridge Night Rocket	Bedlington terrier	Mr. and Mrs. W. A. Rockefeller
1948	Ch. Rock Ridge Night Rocket	Bedlington terrier	Mr. and Mrs. W. A. Rockefeller
1949	Ch. Walsing Winning Trick of Edgerstoune	Scottish terrier	Mrs. John G. Winant
1950	Ch. Tyronne Farm Clancy	Irish setter	Jack Spear
1951	Ch. Rock Falls Colonel	English setter	William T. Holt
1952	Ch. Wyretex Wyns Traveller of Trucote	Fox terrier, wire	Mrs. Leonard Smit
1953	Ch. Rancho Dobe's Storm	Doberman pinscher	Mr. and Mrs. Len Carey

## Westminster Kennel Club Exhibition

Year	Best in show	Breed	Owner
1907-09	Ch. Warren Remedy	Fox terrier, smooth	Winthrop Rutherford
1910	Ch. Sabine Rarebit	Fox terrier, smooth	Sabine Kennels
1911	Ch. Tickle Em Jock	Scottish terrier	A. Albright, Jr.
1912	Ch. Kenmore Sorceress	Airedale terrier	William P. Wolcott
1913	Ch. Strathway Prince Albert	Bulldog	Alex H. Stewart
1914	Ch. Brentwood Hero	Old English sheep dog	Mrs. Tyler Morse
1915-16	Ch. Matford Vic	Fox terrier, wire	George W. Quintard
1917	Ch. Conejo Wycollar Boy	Fox terrier, wire	Mrs. Roy A. Rainey
1918	Ch. Haymarket Faultless	Bull terrier	R. H. Elliot
1919	Ch. Briergate Bright Beauty	Airedale terrier	G. L. L. Davis
1920	Ch. Conejo Wycollar Boy	Fox terrier, wire	Mrs. Roy A. Rainey
1921	Ch. Midkiff Seductive	Cocker spaniel	William T. Payne
1922	Ch. Boxwood Barkentine	Airedale terrier	Frederic C. Hood
1923	No best in show award		
1924	Ch. Barberryhill Bootlegger	Sealyham terrier	Bayard Warren
1925	Ch. Governor Moscow	Pointer	Robert F. Maloney
1926	Ch. Signal Circuit	Fox terrier, wire	Halleston Kennels
1927	Ch. Pinegrade Perfection	Sealyham terrier	Frederic C. Brown
1928	Ch. Talavera Margaret	Fox terrier, wire	R. M. Lewis
1929	Land Loyalty of Bellhaven	Collie	Mrs. Florence B. Ilch
1930-31	Ch. Pendley Calling of Blarney	Fox terrier, wire	John G. Bates
1932	Ch. Nancolleth Markable	Pointer	Giralda Farms
1933	Ch. Warland Protector of Shelterock	Airedale terrier	S. M. Stewart
1934	Ch. Flornell Spicy Bit of Halleston	Fox terrier, wire	Halleston Kennels
1935	Ch. Nunsoe Duc de la Terrace of Blakeen	Poodle	Blakeen Kennels
1936	Ch. St. Margaret Magnificent of Clairedale	Sealyham terrier	Clairedale Kennels
1937	Ch. Flornell Spicy Piece of Halleston	Fox terrier, wire	Halleston Kennels
1938	Daro of Maridor	English setter	Maridor Kennels
1939	Ferry v. Rauhfelsen of Giralda	Doberman pinscher	Giralda Farms
1940-41	Ch. My Own Brucie	Cocker spaniel	H. E. Mellenthin
1942	Ch. Wolvey Pattern Edgerstoune	West Highland terrier	Mrs. John G. Winant
1943	Ch. Pitter Patter of Piperscroft	Miniature poodle	Mrs. P. H. B. Frelinghuysen
1944	Ch. Flornell Rare-Bit of Twin Ponds	Welsh terrier	Mrs. Edward P. Alker
1945	Shieling's Signature	Scottish terrier	Mr. and Mrs. T. H. Snethen
1946	Ch. Hetherington Model Rhythm	Fox terrier, wire	Mr. and Mrs. T. H. Carruthers III
1947	Ch. Warlord of Mazelaine	Boxer	Mr. and Mrs. R. C. Kettles, Jr.
1948	Ch. Rock Ridge Night Rocket	Bedlington terrier	Mr. and Mrs. W. A. Rockefeller
1949	Ch. Mazelaine's Zazarac Brandy	Boxer	Mr. and Mrs. John P. Wagner
1950	Ch. Walsing Winning Trick of Edgerstoune	Scottish terrier	Mrs. John G. Winant
1951	Ch. Bang Away of Sirrah Crest	Boxer	Dr. and Mrs. R. C. Harris
1952	Ch. Rancho Dobe's Storm	Doberman pinscher	Mr. and Mrs. Len Carey
1953	Ch. Topflight Template of Twin Ponds	Welsh terrier	Mrs. Edward P. Alker

## WORLD ALL-TACKLE FISHING RECORDS

## Caught with Rod and Reel in Salt Water

Source: International Game Fish Association, Francesca LaMonte, Secretary.

Species	Lb., oz.	Length	Girth	Where caught	Year	Angler
Albacore	66—4			Catalina, California	1912	Frank Kelly
Amberjack	119—8	63½"	46½"	Rio de Janeiro, Brazil	1952	C. de Mello Cunha
Barracuda	103—4	66"	31½"	West End, Bahamas	1932	C. E. Benet
Bass, Calif. White Sea	83—12	65½"	34"	Baja California, Mex.	1953	L. C. Baumgardner
Bass, Channel	83	52"	29"	Cape Charles, Va.	1949	Zack Waters, Jr.
Bass, Giant Black Sea	483	87"	73"	Coronado Is., Calif.	1951	R. E. De Groff
Bass, Sea	8	22"	19"	Nantucket Sound, Mass.	1951	H. R. Rider
Bass, Giant Sea	551	100"		Galveston Bay, Texas	1937	G. Pangarakis
Bass, Striped	73	60"	30½"	Vineyard Sound, Mass.	1913	C. B. Church
Blackfish (Tautog)	15—14	27½"	19½"	Seabright, N. J.	1951	Caleb Campbell
Bluefish	20	42"	19½"	Montauk, N. Y.	1951	Philip Chasin
Bonefish	17—8	40"	18"	Oahu, T. H.	1952	J. Yoshida
Bonito, Oceanic	39—15	39"	28"	Walker Cay, Bahamas	1952	F. Drowley
Cobia	102	70"	34"	Cape Charles, Va.	1938	J. E. Stansbury
Cod	57—8	56"		Ambrose Lightship, N. Y.	1949	J. Rzeszewicz
Dolphin	75—8	50"		Mafia Channel, E. Africa	1950	A. Conan Doyle
Drum, Black	87—12	50½"	40"	Cape Charles, Va.	1952	P. J. Pennewell
Flounder, Summer	20	37"	32"	Oak Beach, N. Y.	1948	F. H. Kessel
Kingfish (King Mackerel)	76—8	63"	31"	Bimini, Bahamas	1952	R. E. Maytag
Marlin, Blue	742	154½"	68"	Bimini, Bahamas	1949	Aksel Wichfield
Marlin, Pacific Black	1560	174"	81"	Cabo Blanco, Peru	1953	A. C. Glassell, Jr.
Marlin, Silver	618	138"	62"	Tahiti	1930	Zane Grey
Marlin, Striped	692	161"		Balboa, California	1931	A. Hamann
Marlin, White	161	104"	33"	Miami, Florida	1938	L. F. Hooper
Permit	41	40½"	33"	Islamorada, Fla.	1951	E. J. Arnold
Pollack	32—4	44"	26½"	Belmar, N. J.	1953	J. Wolf
Roosterfish	100	54"	32"	Cabo Blanco, Peru	1954	M. Barrenechea
Sailfish, Atlantic	123	44"	32¾"	Walker Cay, Bahamas	1950	H. Teetor
Sawfish	736	175"		Galveston, Texas	1938	Gus Pangarakis
Shark, Mako	1000	144"		Mayor Island, N. Z.	1943	B. D. H. Ross
Shark, Porbeagle	260	48"	68¾"	Durban, S. Africa	1949	J. L. Daniel
Shark, Thresher	922			Bay of Islands, N. Z.	1937	W. W. Dowding
Shark, Tiger	1382	166"	93"	Sydney Heads, Australia	1939	Lyle Bagnard
Shark, White	2372	181"	117"	Streaky Bay, Australia	1953	A. Dean
Snook (Robalo)	50—8	55"		Gatun Spillway, Canal Zone	1944	J. W. Anderson
Swordfish	1182	179¾"	78"	Iquique, Chile	1953	L. E. Marron
Tarpon	247	89½"		Panuco River, Mexico	1938	H. W. Sedgwick
Tuna, Allison	265	73"	53"	Makua, T. H.	1937	J. W. Harvey
Tuna, Big-eyed	368	101"	63½"	Cabo Blanco, Peru	1953	H. L. Woodward
Tuna, Bluefin	977	116"	94½"	St. Ann Bay, Nova Scotia	1950	D. McL. Hodgson
Wahoo	133—8	83"	31"	Green Cay, Bahamas	1943	K. L. Ames, Jr.
Weakfish	17—8	46"	19"	Mullica River, N. J.	1944	A. Weisbecker, Jr.
Weakfish, Spotted	15—3	34½"	20½"	Fort Pierce, Fla.	1949	C. W. Hubbard
Yellowtail	90	59"	35½"	La Paz, Mexico	1948	F. Hickey

## Caught with Rod and Reel in Fresh Water

Source: Field &amp; Stream, 383 Madison Avenue, New York 17, N. Y.

Black Bass, Largemouth	22—4	32½"	28½"	Montgomery Lake, Ga.	1932	George W. Perry
Black Bass, Smallmouth	10—8	22½"	21¼"	Wheeler Dam, Ala.	1950	Owen F. Smith
Bluegill (Sunfish)	4—12	15"	18½"	Ketona Lake, Ala.	1950	T. S. Hudson
Carp	55—5	42"	31"	Clearwater Lake, Minn.	1952	Frank J. Ledwein
Catfish, Channel	55	50"	27"	James River, S. D.	1949	Roy A. Groves
Muskellunge	69—11	63½"	31¼"	Chippewa Flowage, Wis.	1949	Louis Spray
Perch, White	4—12	19½"	13"	Messalonskee Lake, Maine	1949	Mrs. Earl Small
Perch, Yellow	4—3½			Bordentown, New Jersey	1865	Dr. C. C. Abbot
Pickereel, Eastern chain	9	30"	15"	Green Pond, N. J.	1948	Russell Kimble
Pike, Northern	46—2	52½"	25"	Sacandaga Reservoir, N. Y.	1940	Peter Dubuc
Pike, Walleyed	22—4	36¾"	21"	Fort Erie, Ontario	1943	Patrick E. Noon
Salmon, Atlantic	79—2			Tanalev, Norway	1928	Henrik Henriksen
Salmon, Chinook	83			Umpqua River, Oregon	1910	F. R. Steel
Salmon, Landlocked	22—8	36"		Sebagus Lake, Maine	1907	Edward Blakely
Salmon, Silver	31			Cowichan Bay, B. C.	1947	Mrs. Lee Hallberg
Trout, Brook	14—8			Nipigon River, Ontario	1916	Dr. W. J. Cook
Trout, Brown	39—8			Loch Awe, Scotland	1866	W. Muir
Trout, Dolly Varden	32	40½"	29¾"	Pend Oreille Lake, Idaho	1949	N. L. Higgins
Trout, Lake	63—2	51½"	32¾"	Lake Superior	1952	Hubert Hammers
Trout, Rainbow or Steelhead	37	40½"	28"	Pend Oreille Lake, Idaho	1947	Wes Hamlet



## YACHTING

**J**ASON sailed in search of the Golden Fleece. Cleopatra (according to Shakespeare) had a royal barge with purple sails. Columbus had three sailing ships when he crossed the Atlantic westward in 1492. But who the first sailor was and where he launched his primitive craft nobody ever will know. The word "yacht" is of Dutch origin and the first "yacht race" of record in the English language was a sailing contest from Greenwich to Gravesend and return in 1662 between a Dutch yacht and an English yacht designed and, at some part of the race, sailed by Charles II of England. The royal yacht won the contest.

The first yacht club was organized at Cork, Ireland, in 1720 under the name of the Cork Harbour Water Club, later changed to the Royal Cork Yacht Club. The Royal Yacht Squadron was organized

at Cowes in 1812 and the name changed to the Royal Yacht Club in 1820. The New York Yacht Club was organized aboard the Stevens schooner "Gimcrack" on July 30, 1844, and a clubhouse erected at Elysian Fields, Hoboken, N. J., the following year.

From that time until the Civil War races were held over courses starting from the water off the yacht club promontory. One course was to the Sandy Hook Lightship and return.

In 1850 the celebrated "America" was built by a group of New York yachtsmen and sent abroad to compete at Cowes. In a race around the Isle of Wight, with a special cup as a prize, the "America" defeated fourteen English boats and brought back the trophy that has been raced for as "the America's Cup" in many international yacht races since that time.

## WORLD STAR CLASS CHAMPIONS

Source: International Star Class Yacht Racing Association.

Year	Winner	Skipper	Skipper's fleet	Where held
1922	TAURUS	W. L. Inslee	Western L. I. Sound	Western L. I. Sound
1923	TAURUS	W. L. Inslee	Western L. I. Sound	Western L. I. Sound
1924	LITTLE BEAR	J. R. Robinson	Western L. I. Sound	Western L. I. Sound
1925	ACE	Adrian Iselin II	Western L. I. Sound	Western L. I. Sound
1926	RHODY	B. W. Comstock	Narragansett Bay	Western L. I. Sound
1927	TEMPE III	Walton Hubbard	Newport Harbor	Warwick, R. I.
1928	SPARKLER II	P. E. Edrington	New Orleans Gulf	Newport Beach, Calif.
1929	EEL	J. G. Johnson	Chesapeake Bay	New Orleans, La.
1930	PEGGY WEE	A. Knapp	Western L. I. Sound	Gibson Island, Md.
1931	COLLEEN	W. J. McHugh	Central L. I. Sound	Western L. I. Sound
1932	MIST	Edward Fink	Los Angeles Harbor	Southport, Conn.
1933	THREE STAR TWO	Glenn Waterhouse	E. San Francisco Bay	Los Angeles, Calif.
1934	BY-C	H. F. Beardslee	Newport Harbor	San Francisco, Calif.
1935	BY-C	H. F. Beardslee	Newport Harbor	Newport Beach, Calif.
1936	ACE	Adrian Iselin II	Western L. I. Sound	Rochester, N. Y.
1937	LECKY	Milton Wegeforth	San Diego Bay	Western L. I. Sound
1938	PIMM	Walter von Hutschler	Hamburg	San Diego, Calif.
1939	PIMM	Walter von Hutschler	Hamburg	Kiel, Germany
1940	RAMBUNCTIOUS	Jim Cowie	Los Angeles Harbor	San Diego, Calif.
1941	WENCH	George Fleitz	Los Angeles Harbor	Los Angeles, Calif.
1942	*	Harry G. Nye, Jr.	Southern Lake Mich.	Chicago, Ill.
1943	*	Arthur M. Deacon	Western L. I. Sound	Bay Shore, N. Y.
1944	*	Gerald Driscoll	San Diego Bay	Chicago, Ill.
1945	*	Malin Burnham	San Diego Bay	Stamford, Conn.
1946	WENCH II	George Fleitz	Los Angeles Harbor	Havana
1947	GEM II	Durward Knowles	Nassau, Bahamas	Los Angeles, Calif.
1948	TWIN STAR	Lockwood M. Pirie	Wilmette Harbor, Ill.	Lisbon, Portugal
1949	GALE	Harry G. Nye, Jr.	Southern Lake Mich.	Chicago, Ill.
1950	SEA ROBIN	Robert Lippincott	West Jersey	Chicago, Ill.
1951	SHANNON	E. W. Etchells	Central L. I. Sound	Gibson Island, Md.
1952	MEPOE	A. Straulino	Italy	Cascaes, Portugal
1953	MEPOE	A. Straulino	Italy	Naples, Italy

\* Indicates skipper's series in which the contestants drew for local boats each day and brought their own sails.

## Selvy of Furman Excels

Frank Selvy of Furman was credited with 24 major and a number of minor basketball scoring records when he completed his college career with the 1953-54 season. Selvy registered 1,209 points in 29

games in his last year to boost his three-season total to 2,538, one over the previous mark set by Johnny O'Brien of Seattle. He had one 100-point game, against Newberry in February.

## Standard Measurements in Sports

### BASEBALL

- Home plate to pitcher's box—60 feet 6 inches.
- Plate to second base—127 feet  $3\frac{3}{8}$  inches.
- Distance from base to base (home plate included)—90 feet.
- Size of bases—15 inches by 15 inches.
- Pitcher's plate—24 inches by 6 inches.
- Batter's box—6 feet by 4 feet.
- Home plate—17 inches by 17 inches, cut to a point at rear.
- Home plate to backstop—Not less than 60 feet.
- Weight of ball—Not less than 5 ounces nor more than  $5\frac{1}{4}$  ounces.
- Circumference of ball—Not less than 9 inches nor more than  $9\frac{1}{4}$  inches.
- Bat—Must be round, not over  $2\frac{3}{4}$  inches in diameter at thickest part, and of hardwood in one piece or laminated.

### FOOTBALL

- \* Length of field—120 yards.
- Width of field—53  $\frac{1}{3}$  yards (160 feet).
- Height of goal posts—20 feet.
- Height of crossbar—10 feet.
- Width of goal posts—18 feet 6 inches, inside to inside, and not more than 19 feet 2 inches, outside to outside.
- Length of ball—11  $\frac{1}{4}$  inches (long axis).
- Circumference of ball—21.5 inches (middle); 28.5 inches (long axis).
- \* Includes 10 yards of end zone on either side.

### LAWN TENNIS

- Size of court—Rectangle 78 feet long and 27 feet wide (singles); 78 feet long and 36 feet wide (doubles).
- Height of net—3 feet in center, gradually rising to reach 3-foot 6-inch posts at each side of court.
- Ball—Shall be more than  $2\frac{1}{2}$  inches and less than  $2\frac{5}{8}$  inches in diameter and weigh more than 2 ounces and less than  $2\frac{1}{2}$  ounces.
- Service line—21 feet from net.

### POLO

- Playing Field—300 yards long by 200 yards wide, if unboarded; 300 by 160, if boarded. In addition, there is an area of about 10 yards from the sidelines and about 30 yards from the back lines known as the safety zone.
- Goals—8 yards wide and at least 10 feet high. The posts must be light enough to break if collided with.
- Ball—Should not exceed  $3\frac{1}{4}$  inches in diameter and should weigh from  $4\frac{1}{4}$  to  $4\frac{3}{4}$  ounces. Usually made of wood, but experiments have been made with plastic balls.
- Ponies—No restrictions on height of mounts.

### GOLF

- Weight of ball—Not greater than 1.620 ounces.
- Size of ball—Not less than 1.680 inches in diameter.
- Velocity of ball—Not greater than 250 feet per second.
- Hole—Shall be  $4\frac{1}{4}$  inches in diameter and at least 4 inches deep.
- Clubs—No restrictions on the size; 14 is the maximum number permitted in championship competition.

### ICE HOCKEY

- Size of rink—200 feet long by 85 feet wide (desired size).
- Size of goal—6 feet wide by 4 feet in height.
- Puck—1 inch thick and 3 inches in diameter; made of vulcanized rubber; weight— $6\frac{1}{4}$  ounces (unofficial).
- Length of stick—Not more than 53 inches from heel to end of shaft nor  $14\frac{3}{4}$  inches from heel to end of blade. Blade should not exceed 3 inches in height, except goalkeeper's stick, which shall not exceed  $3\frac{1}{2}$  inches in height except at the heel, where it must not exceed  $4\frac{1}{2}$  inches.

### BASKETBALL

#### (National Collegiate A. A. Rules)

- Playing court—94 feet long by 50 feet wide (maximum dimensions); 74 feet long by 42 feet wide (minimum dimensions).
- Baskets—Rings 18 inches in inside diameter, with white cord nets, 15 to 18 inches in length. Each ring is made of metal and is not more than  $\frac{5}{8}$  of an inch in diameter.
- Height of basket ring—10 feet.
- Weight of ball—Not less than 20 ounces nor more than 22.
- Circumference of ball—No greater than 30 inches and not less than  $29\frac{1}{2}$ .
- Free-throw line—15 feet from the face of the backboard.

### BOXING

- Size of ring—The matches take place in an area, not less than 18 nor more than 20 feet square. It is enclosed by three 1-inch covered ropes. The floor has a 2-inch padding that extends at least 6 inches beyond the roped area in the case of elevated rings and 3 feet if the ring is at floor level.
- Gloves—In professional fights, 8-ounce gloves generally are used, except in title contests, where 6-ounce gloves are the custom. The A.A.U. requires 8-ounce gloves up to the welterweight class and 10-ounce for the heavier divisions. Colleague rules call for a minimum of 12 ounces.

## CYCLING

## WORLD RECORDS

Source: Otto Elsele, Associate Editor, *American Bicyclist*.

## OUTDOOR PROFESSIONAL

## Unpaced Standing Start

Distance	Holder and country	Where made	Year	Time
1 kilometer	R. H. Harris, Great Britain	Milan	1952	1:08 $\frac{3}{5}$
5 kilometers	F. Battesini, Italy	Milan	1938	6:21
10 kilometers	M. Archambaud, France	Milan	1937	12:53
20 kilometers	M. Archambaud, France	Milan	1937	25:59 $\frac{3}{5}$
100 kilometers	M. de Benedetti, Italy	Milan	1942	2:20:44 $\frac{4}{5}$
1 hour	F. Coppi, Italy	Milan	1942	23 mi. 805 yd.

## INDOOR PROFESSIONAL

## Unpaced Standing Start

1 kilometer	R. H. Harris, Great Britain	Paris	1952	1:09
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## Motor-Paced\*

100 kilometers	J. Lohmuller, Switzerland	Paris	1952	1:29:37.2
1 hour	J. Goutorbe, France	Paris	1952	71 km. 268 m.

\* Third U. C. I. regulations (1933, etc.).

## OUTDOOR AMATEUR

## Unpaced Standing Start

1 kilometer	R. Vargachkin, Russia	Moscow	1953	1:10 $\frac{3}{5}$
5 kilometers	F. Aureggi, Italy	Milan	1952	6:32
10 kilometers	F. Aureggi, Italy	Milan	1952	13:03 $\frac{2}{5}$
20 kilometers	F. Aureggi, Italy	Milan	1952	27:13 $\frac{4}{5}$
1 hour	F. Aureggi, Italy	Milan	1951	27 mi. 652 yd.

## NATIONAL AMATEUR CHAMPIONS

Source: Amateur Bicycle League of America, Inc.

Year	Winner	Where held	Year	Winner	Where held
1921	Arthur Nieminsky, New York	Washington, D. C.	1939	Martin Deras, California	Columbus
1922	Carl Hambacher, New Jersey	Atlantic City	1940	Furman Kugler, New Jersey	Detroit
1923	Charles Barclay, California	Chicago	1941	Marvin Thomson, Illinois	Pasadena, Calif.
1924	Charlie Winter, New York	Buffalo	1945	Ted Smith, New York	Chicago
1925	Edward Merkner, Illinois	St. Louis	1946	Don Hester, California	Columbus
1926	Edward Merkner, Illinois	Philadelphia	1947	Ted Smith, New York	Philadelphia
1927	Jimmy Walthour, Jr., New York	Louisville	1948	Ted Smith, New York	Kenosha, Wis.
1928	R. J. Connor, District of Columbia	Kenosha, Wis.	1949	James Lauf, Maryland	San Diego, Calif.
1929	Sergio Matteini, New York	Newark, N. J.	1950	Robert Pfarr, Wisconsin	New Brunswick
1930	Bobby Thomas, Wisconsin	Kenosha, Wis.	1951	Gus Gatto, California	Columbus
1935	Cecil Hursey, Georgia	Atlantic City	1952	Steve Hromjak, Ohio	New Brunswick
1936	Jackie Simes, New Jersey	St. Louis	1953	Ronald Rhoads, California	St. Louis
1937	Charles Bergna, New Jersey	Buffalo			

## AMATEUR BICYCLE LEAGUE OF AMERICA RECORDS

## ROAD COMPETITION—SCRATCH

Distance, mi.	Time	Record-holder and where made	Date
1/4	:29 2/5	B. W. King, Atlantic City, N. J.	Sept. 16, 1922
1/3	:38 3/5	Charles Winters, Chicago, Ill.	Sept. 8, 1923
1/2	1:04 3/5	John Leahy, Louisville, Ky.	Sept. 11, 1927
1	2:02	Henry Surman	
		R. L. Guthridge	
		S. C. Haberle	
		Westfield, N. J.	Aug. 8, 1908
2	4:46 1/5	Theodore Becker, Louisville, Ky.	Sept. 10, 1927
3	7:18 2/5	Don Sheldon, Columbus, Ohio	Aug. 18, 1946
5	11:38	Vaughan Angell, Columbus, Ohio	Aug. 4, 1951
10	23:22 1/5	Gus Gatto, Columbus, Ohio	Aug. 5, 1951
15	48:40 2/5	Jackie W. Simes, Jr., Washington, D. C.	Oct. 11, 1936
20	45:22	A. E. Wahl, Buffalo, N. Y.	July 4, 1921
25	1:02:14	Charles R. Thomas, Tonawanda, N. Y.	Sept. 6, 1937
50	2:02:00	Leo Adams, Buffalo, N. Y.	July 14, 1935
100	4:33:25 1/5	Louis Maltese, Union City, N. J., to South Philadelphia, Pa.	June 6, 1926
125	6:20:20 4/5	Don Sheldon, Old Westbury, N. Y.	Oct. 19, 1947
200	9:56:49	Everett Cassagneres, Pittsburgh, Pa.	Oct. 4, 1953



## BILLIARDS

APPARENTLY nobody knows where billiards originated. Some trace the game back to ancient Greece or early Egyptian days; others insist it originated in France or England in medieval times. Shakespeare must have believed the Egyptian tale, because in *Antony and Cleopatra* he has Cleopatra saying: "Let's to billiards; come, Charmian." There is an illustration of Louis XIV of France playing billiards in 1694 and using a shovel-shaped stick to set the "cue ball" in motion, from which it is evident that the pointed cue was a later development.

Certainly the game was popular in England and on the Continent in the 17th

and 18th centuries and early settlers in North America are supposed to have introduced the game here. How to apply "english" to a billiard ball was discovered by Jack Carr, an Englishman, in 1820. A Frenchman named Mingaud is credited with having invented the "draw" shot at about the same time and also to have devised leather tips for wooden cues. Championship competition, amateur and professional, is a modern development in billiards. The first formal professional tournament held in the United States took place in New York in 1863 with eight players competing. The first three-cushion tournament was held in St. Louis in 1878.

### Billiards Statistics

Source: Press Service Bureau, The Billiard Congress of America.

#### World Three-cushion Champions

1878	Leon Magnus	1912	John Horgan	1920	John Layton	1935	Welker Cochran
1899	W. H. Catton	1913-14	Alfredo DeOro	1921	Augie Kieckhefer	1936	Willie Hoppe
1900	Eugene Carter	1915	George Moore	1921-23	John Layton	1937	Welker Cochran
1900	Lloyd Jevne	1915	William H. Huey	1923	Tiff Denton	1938	Welker Cochran
1907	Harry P. Cline	1916	Alfredo DeOro	1924	R. L. Cannafax	1939	Joe Chamaco
1908	John Daly	1916	Charles Ellis	1925	R. L. Cannafax	1940-44	Willie Hoppe
1908	Thomas Hueston	1916	Charles McCourt	1926-27	Otto Reisel	1944	Welker Cochran
1908-09	Alfredo DeOro	1916	Hugh Heal	1927	Augie Kieckhefer	1945-46	Welker Cochran
1910	Fred Eames	1916	George Moore	1928	Otto Reisel	1947	Willie Hoppe
1910	Alfredo DeOro	1917	Charles McCourt	1928-29	John Layton	1948	Willie Hoppe
1910	John Daly	1917	R. L. Cannafax	1930	John Layton	1949	Willie Hoppe
1910	Thomas Hueston	1917-18	Alfredo DeOro	1931	Arthur Thurnblad	1950	Willie Hoppe
1911	John Daly	1918-19	Augie Kieckhefer	1932	Augie Kieckhefer	1951	Willie Hoppe
1911	Alfredo DeOro	1919	Alfredo DeOro	1933	Welker Cochran	1952	Willie Hoppe
1912	Joe Carney	1919	R. L. Cannafax	1934	John Layton	1953	Ray Kilgore

#### THREE-CUSHION RECORDS

High Runs				High Averages—Best Game			
Year	Holder	Event	Points	Year	Holder	Points	Event
1915	Charles Morin.....	Tournament (Pro).....	18	1925	Otto Reisel.....	50 in 16 innings	Interstate League
1919	Tiff Denton.....	Tournament (World).....	17	1925	Otto Reisel.....	100 in 57 innings	Interstate League
1926	John Layton.....	Interstate League.....	18	1925	Otto Reisel.....	150 in 104 innings	Interstate League
1927	Willie Hoppe.....	American League.....	20	1930	John Layton.....	50 in 23 innings	Tournament
1928	Willie Hoppe.....	Exhibition vs. C. C. Peterson	25	1939	Joe Chamaco.....	50 in 23 innings	National League*
1930	Gus Copulos.....	Tournament (World).....	17	1940	Jay N. Bozeman.....	50 in 23 innings	Tournament†
1936	Willie Hoppe.....	Match play.....	15	1945	Willie Hoppe.....	50 in 20 innings	Tournament†
1939	Joe Chamaco.....	National League*.....	18	1945	Welker Cochran.....	60 in 20 innings	Match
1940	Tiff Denton.....	Tournament†.....	17	1947	Willie Hoppe.....	60 in 21 innings	Match†
1945	Willie Hoppe.....	Match play†.....	20				

\* No safeties. † Safeties. ‡ No safeties; optional cue ball first shot of inning.

\* No safeties. † Safeties. ‡ No safeties; optional cue ball first shot of inning.

#### National Amateur Three-cushion Champions

1910—Pierre Maupome	1925-26—Dr. A. J. Harris	1931—Frank Flemming	1946—Edward Lee†
1911—Charles Morin	1927—Dr. L. P. Packlin	1931-35—Edward Lee	1946—Robert M. Lord†
1919—Arthur Newman	1928—J. N. Bozeman	1936—Edward Lee*	1947—Robert M. Lord†
1920—W. B. Huey	1929—Charles Jordan	1937—A. Primeau	1948—Robert M. Lord†
1921—Earl Lookabaugh	1929—Max Shimon	1938—Gene Deardorff	1948—C. T. Vandover†
1922—Frank Flemming	1930—Joseph Hall	1939—Gene Deardorff	1948-49—Edward Lee†
1923—Robert M. Lord	1930—Max Shimon	1945-46—	1949-50—Edward Lee†
1924—Frank Flemming	1930—R. B. Harper	C. T. Vandover†	1951-53—Edward Lee†

\* World champion. † Events limited to athletic clubs. ‡ Match.

‡ Match.

Willie Hoppe, who retired at the age of 65 in 1952, won the record number of 51 world billiard titles in a career that started when he was in his teens. Hoppe's first major victory came when he defeated

Maurice Vignaux of France for the world 18.2 championship in January, 1906. The year he retired Hoppe captured the three-cushion crown for the sixth time in succession.

## World Pocket Billiard Champions

1878-80 Cyrille Dion	1901 Frank Sherman	1912 R. J. Ralph	1937 Ralph Greenleaf
1881 Gottlieb Wahlstrom	1901 Alfredo DeOro	1913 Alfredo DeOro	1938 James Caras
1882-83 Albert Frey	1902 William Clearwater	1913-15 Bennie Allen	1939 James Caras
1884 J. L. Malone	1902 Grant Eby	1916 John Layton	1940 Andrew Ponzi (l)
1886-87 Alfred Frey	1903 Alfredo DeOro	1916-18 Frank Taberski	1941 Willie Mosconi (l)
1887 J. L. Malone (f)	1904 Alfredo DeOro	1919-24 Ralph Greenleaf	1941 Erwin Rudolph (t)
1887-88 Alfredo DeOro	1905 Jerome Keogh (f)	1925 Frank Taberski	1942 Irving Crane (m)
1888 Frank Powers	1905 Alfredo DeOro	1926 Ralph Greenleaf	1942 Willie Mosconi (t)
1889 Albert Frey	1905 Thomas Hueston (f)	1926 Erwin Rudolph	1943 Andrew Ponzi (m)
1889 Alfredo DeOro	1906 Thomas Hueston	1926 Thomas Hueston	1944 Willie Mosconi (m)
1890 H. Manning	1906 John Horgan	1927 Frank Taberski	1945 Willie Mosconi
1891 Frank Powers (f)	1906 Jerome Keogh	1927-28 Ralph Greenleaf	1946 Willie Mosconi
1892-94 Alfredo DeOro	1907 Thomas Hueston	1928 Frank Taberski	1946 Irving Crane (t)
1895 William Clearwater	1908 Thomas Hueston	1929 Ralph Greenleaf	1947 Willie Mosconi (m)
1895 Alfredo DeOro	1908 Frank Sherman	1929 Frank Taberski	1948 Willie Mosconi (m)
1896 Frank Stewart (f)	1908 Alfredo DeOro	1930 Erwin Rudolph	1949 Jimmy Caras (t)
1897 Grant Eby	1909 Charles Weston	1930-32 Ralph Greenleaf	1950 Willie Mosconi (t)
1897 Jerome Keogh	1909 John Kling	1933-34 Erwin Rudolph	1951 Willie Mosconi (t)
1898 William Clearwater	1910 Thomas Hueston	1935 Andrew Ponzi	1952 Willie Mosconi (t)
1898 Jerome Keogh	1910 Jerome Keogh	1936 James Caras	1953 Willie Mosconi (t)
1899-1900 Alfredo DeOro	1910-12 Alfredo DeOro		

(f) Forfeit. (l) League play. (t) Tourney. (m) Match.

## POCKET BILLIARD RECORDS

## (14.1 Championship Game)

Event	Holder	Year	Event	Holder	Year
Tournament—high run.....	126 Ralph Greenleaf	1929	Tournament—best game in innings.....	2 Ralph Greenleaf	1929†
Tournament—high run.....	125 Bennie Allen	1935	Tournament (national)—best game in innings.....	2 Irving Crane	1949
Tournament—high run.....	125 George Kelly	1935	Tournament (world)—best game in innings.....	2 Willie Mosconi	1952†
Tournament—high run.....	125 Willie Mosconi	1945	Match—high run for single game.....	127 Willie Mosconi	1945
Tourney (world)—high run..	121 Willie Mosconi	1952	Match—high run for single game.....	127 James Caras	1946
Exhibition—high run.....	322 Willie Mosconi	1953	Match—high run in continuous play.....	153 Andrew Ponzi	1934
Tournament—high single game average.....	63 Ralph Greenleaf	1929			
Tournament—high grand average*.....	18.75 Willie Mosconi	1951			

\* 4½ by 9 table. † Tied by Willie Mosconi in 1946.

‡ Tied by Mosconi in 1953.

## Record of Fastest Mile Runs

The 4-minute mile became a reality in 1954, with Roger Bannister, an English interne, gaining the distinction of being the first to reach one of man's hitherto unattainable goals. The 25-year-old Bannister, running under exceedingly unfavorable conditions, covered the distance in 3 minutes 59.4 seconds at Oxford, England, on May 6. His mile smashed the world record of Gunder Hagg of Sweden, who was timed in 4:01.4 at Malmö, Sweden, on July 17, 1945.

Shortly after Bannister's electrifying performance, John Landy of Australia, who had turned in a number of races close to the 4-minute mark, finally broke through

and lowered the record to 3:58. Landy set his mark at Turku, Finland, on June 21.

Landy and Bannister matched strides in the mile in the British Empire Games at Vancouver, B. C., on Aug. 7, 1954. Bannister won in 3:58.8 and Landy was second in 3:59.6.

The other finishers in the Vancouver mile: 3, Rich Ferguson, Canada, 4:04.6; 4, Vic Milligan, Northern Ireland, 4:05; 5, Murray Halberg, New Zealand, 4:07.2; 6, Ian Boyd, England, 4:07.2; 7, Bill Baillie, New Zealand, 4:11.

## The record of the world's fastest miles:

Runner and country	Site	Date	Time
John Landy, Australia	Turku, Finland	June 21, 1954	3:58.0
Roger Bannister, England	Vancouver, B. C.	Aug. 7, 1954	3:58.8
Roger Bannister, England	Oxford, England	May 6, 1954	3:59.4
John Landy, Australia	Vancouver, B. C.	Aug. 7, 1954	*3:59.6
Wes Santee, United States	Compton, Calif.	June 4, 1954	4:00.6
Wes Santee, United States	Los Angeles, Calif.	June 11, 1954	4:00.7
Wes Santee, United States	Kansas City, Mo.	May 29, 1954	4:01.3
Gunder Hagg, Sweden	Malmö, Sweden	July 17, 1945	4:01.4
Arne Andersson, Sweden	Malmö, Sweden	July 18, 1944	4:01.6
John Landy, Australia	Turku, Finland	May 31, 1954	4:01.6
John Landy, Australia	Stockholm, Sweden	June 8, 1954	4:01.6

\* Finished second.

## TRACK AND FIELD

**R**UNNING, jumping, hurdling and throwing weights—track and field sports, in other words—are as natural to boys and young men as eating, drinking and breathing. Unorganized competition in this form of sport goes back beyond the Cave Man era. Organized competition begins with the first recorded Olympic Games in Greece, 776 B. C., when Coroebus of Elis won the only event on the program, a race of approximately 200 yards. The Olympic Games, with an ever-widening program of events, continued until “the glory that was Greece” had faded and “the grandeur that was Rome” was tarnished, and finally were abolished by decree of Emperor Theodosius I of Rome in A. D. 394. The Tailteann Games of Ireland are supposed to have antedated the first Olympic Games by some centuries, but we have no records of the specific events and winners thereof.

Professional contests of speed and strength were popular at all times and in many lands, but the widespread competition of amateur athletes in track and field

sports is a comparatively modern development. The first organized amateur athletic meet of record was sponsored by the Royal Military Academy at Woolwich, England, in 1849. Oxford and Cambridge track and field rivalry began in 1864 and the English amateur championships were established in 1866. In the United States such organizations as the New York Athletic Club and the Olympic Club of San Francisco conducted track and field meets in the 1870's, and a few colleges joined to sponsor a meet in 1874. The success of the college meet led to the formation of the Intercollegiate Association of Amateur Athletes of America and the holding of an annual set of championship games beginning in 1876.

Many athletic clubs joined the National Association of Amateur Athletes of America, formed in 1879, but dissension broke up this organization and the Amateur Athletic Union, organized in 1888, has been the ruling body in American amateur athletics since that time.

## Track and Field Statistics

Source: *Official A.A.U. Track and Field Rules and Records Book*. Reprinted by courtesy of the publishers, the Amateur Athletic Union of the United States, 233 Broadway, New York, N. Y.

### MEN'S WORLD RECORDS

Recognized by the International Amateur Athletic Federation, Aug. 21, 1954

#### RUNNING

Event	Record	Holder	Home country	Where made	Date
100 yd.	9.3 s.	Melvin E. Patton	United States	Fresno, Calif.	May 15, 1948
		Hector Hogan	Australia	Sydney	Mar. 13, 1954
220 yd.	20.2 s.	Melvin E. Patton	United States	Los Angeles	May 7, 1949
440 yd.	46 s.	Herbert McKenley	Jamaica, B.W.I.	Berkeley, Calif.	June 5, 1948
880 yd.	1 m. 48.6 s.	Malvin Whitfield	United States	Turku, Finland	July 17, 1953
1 mi.	3 m. 58 s.	John Landy	Australia	Turku, Finland	June 21, 1954
2 mi.	8 m. 40.4 s.	Gaston Reiff	Belgium	Paris	Aug. 26, 1952
3 mi.	13 m. 32.2 s.	Fred Green	England	London	July 10, 1954
		Chris Chataway	England	London	July 10, 1954
6 mi.	27 m. 59.2 s.	Emil Zatopek	Czechoslovakia	Brussels	June 1, 1954
10 mi.	48 m. 12 s.	Emil Zatopek	Czechoslovakia	Boleslav, Czech.	Sept. 29, 1951
15 mi.	1 h. 16 m. 26.4 s.	Emil Zatopek	Czechoslovakia	Boleslav, Czech.	Oct. 26, 1952
1 hr.	12 mi. 810 yd.	Emil Zatopek	Czechoslovakia	Boleslav, Czech.	Sept. 29, 1951

#### WALKING

Event	Record	Holder	Home country	Where made	Date
2 mi.	12 m. 45 s.	Werner Hardmo	Sweden	Malmo	Sept. 1, 1945
5 mi.	35 m. 15 s.	Roland Hardy	Gt. Britain	London	May 31, 1952
7 mi.	48 m. 15.2 s.	Werner Hardmo	Sweden	Kumla, Sweden	Sept. 9, 1945
10 mi.	1 h. 10 m. 45.8 s.	J. Dolezal	Czechoslovakia	Boleslav, Czech.	April 30, 1954
20 mi.	2 h. 33 m. 9.4 s.	J. Dolezal	Czechoslovakia	Boleslav, Czech.	May 14, 1954
30 mi.	4 h. 21 m. 11 s.	J. Ljunggren	Sweden	Fristad, Sweden	Aug. 8, 1953
1 hr.	8 mi.; 1025 yd.	John Mikaelsson	Sweden	Stockholm	Sept. 1, 1945
2 hr.	15 mi. 1591 yd.	J. Dolezal	Czechoslovakia	Prague	Oct. 12, 1952



## RUNNING—METRIC DISTANCES

Event	Record	Holder	Home country	Where made	Date
		Jesse Owens	United States	Chicago	June 20, 1936
		Harold Davis	United States	Compton, Calif.	June 6, 1941
100 meters	10.2 s.	Lloyd LaBeach	Panama	Fresno, Calif.	May 15, 1948
		N. H. Ewell	United States	Evanston, Ill.	July 9, 1948
		E. McD. Bailey	Gt. Brit. & No. Ire.	Belgrade	Aug. 25, 1951
200 m.	20.2 s.	Melvin E. Patton	United States	Los Angeles	May 7, 1949
400 m.	45.8 s.	George Rhoden	Jamaica, B.W.I.	Eskilstuna, Sweden	Aug. 22, 1950
800 m.	1 m. 46.6 s.	Rudolph Harbig	Germany	Milan	July 15, 1939
1,000 m.	2 m. 20.4 s.	Audun Boyen	Norway	Oslo	Sept. 17, 1953
1,500 m.	3 m. 41.8 s.	John Landy	Australia	Turku	June 21, 1954
2,000 m.	5 m. 7 s.	Gaston Reiff	Belgium	Brussels	Sept. 29, 1948
3,000 m.	7 m. 56.8 s.	Gaston Reiff	Belgium	Gavle, Sweden	Aug. 12, 1949
5,000 m.	13 m. 57.2 s.	Emil Zatopek	Czechoslovakia	Paris	May 30, 1954
10,000 m.	28 m. 54.2 s.	Emil Zatopek	Czechoslovakia	Brussels	June 1, 1954
15,000 m.	44 m. 54.6 s.	Emil Zatopek	Czechoslovakia	Boleslav	Sept. 29, 1951
20,000 m.	59 m. 51.7 s.	Emil Zatopek	Czechoslovakia	Boleslav	Sept. 29, 1951
25,000 m.	1 h. 19 m. 11.8 s.	Emil Zatopek	Czechoslovakia	Boleslav	Oct. 26, 1952
30,000 m.	1 h. 35 m. 23.8 s.	Emil Zatopek	Czechoslovakia	Boleslav	Oct. 26, 1952
1 hr.	20,052 meters 40 cm.	Emil Zatopek	Czechoslovakia	Boleslav	Sept. 29, 1951

## WALKING—METRIC DISTANCES

Event	Record	Holder	Home country	Where made	Date
3,000 m.	11 m. 51.8 s.	Werner Hardmo	Sweden	Malmö	Sept. 1, 1945
5,000 m.	20 m. 26.8 s.	Werner Hardmo	Sweden	Kumla	July 31, 1945
10,000 m.	42 m. 39.6 s.	Werner Hardmo	Sweden	Kumla	Sept. 9, 1945
15,000 m.	1 h. 5 m. 59.6 s.	J. Dolezal	Czechoslovakia	Boleslav	April 30, 1954
20,000 m.	1 h. 30 m. 26.4 s.	J. Dolezal	Czechoslovakia	Boleslav	Nov. 1, 1953
30,000 m.	2 h. 21 m. 38.6 s.	J. Dolezal	Czechoslovakia	Prague	Oct. 12, 1952
50,000 m.	4 h. 29 m. 58 s.	J. Ljunggren	Sweden	Fristad, Sweden	Aug. 8, 1953
1 hr.	13,812 m.	John Mikaelsson	Sweden	Stockholm	Sept. 1, 1945
2 hr.	25,595 m.	J. Dolezal	Czechoslovakia	Prague	Oct. 12, 1952

## HURDLES (10 hurdles)

Event	Record	Holder	Home country	Where made	Date
120 yd.	13.5 s.	R. A. Attlessey	United States	Fresno, Calif.	May 13, 1950
220 yd.	22.3 s.	Harrison Dillard	United States	Salt Lake City, Utah	June 21, 1947
440 yd.	51.6 s.	Charles Moore, Jr.	United States	London	Aug. 9, 1952
110 m.	13.6 s.	Harrison Dillard	United States	Lawrence, Kansas	Apr. 17, 1948
		R. A. Attlessey	United States	College Park, Md.	June 24, 1950
200 m.	22.3 s.	Fred Wolcott	United States	Princeton, N. J.	June 8, 1940
400 m.	50.4 s.	Harrison Dillard	United States	Salt Lake City, Utah	June 21, 1947
		J. Lituyev	U.S.S.R.	Budapest	Sept. 20, 1953

## RELAY RACES

Event	Record	Holder	Home country	Where made	Date
440 yd. (4 x 110)	40.5 s.	Univ. of So. California	United States	Fresno, Calif.	May 14, 1938
		(L. LaFond, W. C. Andersson, P. Jordan, A. Talley)			
880 yd. (4 x 220)	1 m. 24 s.	Univ. of So. California	United States	Los Angeles	May 20, 1949
		(M. Patton, R. Frazier, G. Pasquali, N. Stocks)			
1 mi. (4 x 440)	3 m. 8.8 s.	National Team	United States	London	Aug. 9, 1952
		(E. Cole, J. W. Mashburn, R. Pearman, M. Whitfield)			
2 mi. (4 x 880)	7 m. 29.2 s.	National Team	United States	London	Aug. 4, 1952
		(W. Ashenfelter, R. Pearman, J. Barnes, M. Whitfield)			
4 mi. (4 x 1 mile)	16 m. 41 s.	National Team	Gt. Brit. & No. Ire.	London	Aug. 1, 1953
		(C. Chataway, G. Nankeville, D. Seaman, R. Bannister)			

## RELAY RACES—METRIC DISTANCES

Event	Record	Holder	Home country	Where made	Date
400 m. (4 x 100)	39.8 s.	U. S. A. National Team	United States	Berlin	Aug. 9, 1936
		(Owens, Metcalfe, Draper, Wykoff)			
800 m. (4 x 200)	1 m. 24 s.	Univ. of So. California	United States	Los Angeles	May 20, 1949
		(M. Patton, R. Frazier, G. Pasquali, N. Stocks)			
1,600 m. (4 x 400)	3 m. 3.9 s.	National Team	Jamaica, B.W.I.	Helsinki	July 27, 1952
		(A. Wint, L. Laing, H. McKenley, G. Rhoden)			
3,200 m. (4 x 800)	7 m. 28 s.	Uda	Czechoslovakia	Boleslav	July 29, 1953
		(D. Cikel, A. Strzinck, L. Leika, S. Jungwirth)			
6,000 m. (4 x 1500)	15 m. 27.2 s.	Great Britain and Northern Ireland		London	Sept. 23, 1953
		(R. H. Dunkley, D. C. Law, Gordon Pirie, Bill Nankeville)			

## FIELD EVENTS

Event	Record	Holder	Home country	Where made	Date
High jump.....	6 ft. 11½ in. (2.12 m.)	Walter Davis.....	United States.....	Dayton, Ohio.....	June 27, 1953
Running broad jump.....	26 ft. 8¼ in. (8.13 m.)	Jesse Owens.....	United States.....	Ann Arbor.....	May 25, 1935
Rng. hop, step, jump.....	53 ft. 2¼ in. (16 m. 23 cm.)	L. Scherbakov.....	U.S.S.R.....	Moscow.....	July 19, 1953
Pole vault.....	15 ft. 7¼ in. (4.77 m.)	C. Warmerdam.....	United States.....	Modesto, Calif.....	May 23, 1942
16-lb. shot-put.....	59 ft. 2¼ in. (18.04 m.)	Parry O'Brien.....	United States.....	Compton, Calif.....	June 5, 1953
Discus throw.....	194 ft. 6 in. (59.28 m.)	Fortune Gordien.....	United States.....	Pasadena, Calif.....	Aug. 22, 1953
Javelin throw.....	263 ft. 10 in. (80.41 m.)	Franklin Held.....	United States.....	Pasadena, Calif.....	Aug. 8, 1953
16-lb. hammer throw.....	204 ft. 7 in. (62.36 m.)	Sverre Strandli.....	Norway.....	Oslo.....	Sept. 5, 1953

## DECATHLON

Points	Holder	Home country	Where made	Date
7,887.....	Robert Mathias.....	United States.....	Helsinki.....	July 25-26, 1952

## WOMEN'S WORLD RECORDS

## RUNNING

Event	Record	Holder	Home country	Where made	Date
100 yd.....	10.4 s.	Marjorie Jackson.....	Australia.....	Sydney.....	Mar. 8, 1952
220 yd.....	24.2 s.	F. E. Blankers-Koen.....	Netherlands.....	Brescia, Italy.....	June 29, 1950
880 yd.....	2 m. 11.6 s.	A. Kazi.....	Hungary.....	Budapest.....	May 29, 1954
60 m.....	7.3 s.	Stella Walasiewicz.....	Poland.....	Lemberg, Pol.....	Sept. 24, 1933
100 m.....	11.4 s.	Marjorie Jackson.....	Australia.....	Gifu, Japan.....	Oct. 4, 1953
200 m.....	23.4 s.	Marjorie Jackson.....	Australia.....	Helsinki.....	July 25, 1952
800 m.....	2 m. 7.3 s.	N. Otkalenko.....	U.S.S.R.....	Moscow.....	Aug. 27, 1953

## RELAY RACES

440 yd. (4 x 110).....	46.3 s.	National Team.....	Australia.....	London.....	Aug. 4, 1952
		(S. S. de la Hunt, V. Johnson, W. Cripps, M. Jackson)			
400 m. (4 x 100).....	45.6 s.	National Team.....	U.S.S.R.....	Budapest.....	Sept. 20, 1953
		(V. Kalashnikova, Z. Sofronova, N. Dvalijvili-Hnikina, I. Turova)			
880 yd. (4 x 220).....	1 m. 39.9 s.	Great Britain and Northern Ireland.....	London.....		Sept. 30, 1953
		(A. Pashley, J. Newbould, S. Hampton, A. Johnson)			
800 m. (4 200).....	1 m. 36.4 s.	National Team.....	U.S.S.R.....	Bucharest.....	Sept. 9, 1953
		(F. Calajnicova, V. Kazenteva, Z. Sofronova, N. Dvalijvili-Hnikina)			
2,400 m. (3 x 800).....	6 m. 33.2 s.	National Team.....	U.S.S.R.....	Budapest.....	Sept. 19, 1953
		(N. Chernoshchok, D. Barahovich, N. Otkalenko-Pletneva)			
1½ mi. (3 x 880).....	6 m. 49 s.	Great Britain and Northern Ireland.....	London.....		Aug. 3, 1953
		(N. Smalley, D. Leather, M. Slemmon)			

## HURDLES

80 m.....	10.9 s.	{ S. S. de la Hunt.....	Australia.....	Helsinki.....	July 24, 1952
		{ M. Golubnichaja.....	U.S.S.R.....	Kiev.....	Aug. 3, 1954

## FIELD EVENTS

Rng. high jump.....	5 ft. 7¼ in. (1.73 m.)	A. Chudin.....	U.S.S.R.....	Kiev.....	May 22, 1954
Broad jump.....	20 ft. 7¼ in. (6.28 m.)	Yvette Williams.....	New Zealand.....	Sydney.....	Feb. 20, 1954
Shot-put.....	53 ft. 1¼ in. (16 m. 20 cm.)	Galina Zybina.....	U.S.S.R.....	Malmö.....	Sept. 20, 1952
Discus throw.....	187 ft. 1½ in. (57 m. 4 cm.)	Nina Dumbadze.....	U.S.S.R.....	Tbilisi, U.S.S.R.....	Oct. 18, 1952
Javelin throw.....	182 ft. (55.48 m.)	N. Konjaeva.....	U.S.S.R.....	Kiev.....	Aug. 6, 1954

## PENTATHLON

418 points.....	Gisela Mauermayer.....	Germany.....	Stuttgart.....	July 16-17, 1938
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## INDOOR MILE WINNERS, 1954

Source: Stan Saplin, *New York Journal-American*.

Boston K. of C.—Josy Barthel, Luxembourg.....	4:10.3
Philadelphia Inquirer—Len Truex, Lima, Ohio.....	4:11.6
Washington Star—Len Truex.....	4:13.4
Boston A. A. (Hunter)—Josy Barthel.....	4:07.7
Milrose (Wanamaker)—Josy Barthel.....	4:07.5
Metropolitan College—Terry Foley, Fordham.....	4:18.9
New York A.C. (Baxter)—Josy Barthel.....	4:08.5
National Interscholastic—Jerry Salvatore, Brooklyn Prep.....	4:28.6
National A.A.U.—Josy Barthel.....	4:11.7
Big Seven—Wes Santee, Kansas.....	4:06.5
I.C. 4-A—Dick Ollen, Northeastern.....	4:20.1
Heptagonal—Lewis Olive, Army.....	4:20.9
Big Ten—John Ross, Michigan.....	4:11.2
Pioneer Club (Pegler)—Fred Wilt, New York A.C.....	4:15.6
Milwaukee Journal—Len Truex.....	4:13.4
Cleveland K. of C.—Len Truex.....	4:16.2
Chicago Relays (Bankers)—Wes Santee.....	4:11.8

## BOSTON MARATHON, 1954

(Fifty-eighth running)

## Leading Finishers

	h. m. s.
1. Veikko Karvonen, Finland.....	2:20:39
2. James H. Peters, England.....	2:22:40
3. Erki Puolakka, Finland.....	2:24:25
4. Kurao Hiroshima, Japan.....	2:25:30
5. Katsuo Nishida, Japan.....	2:27:35
6. Delfo Cabrera, Argentina.....	2:27:50
7. John J. Kelley, Boston.....	2:28:51
8. Ezequiel Bustamante, Argentina.....	2:33:40
9. Nick Costes, Farrell, Pa.....	2:35:17
10. Nobuyoshi Sadanaga, Japan.....	2:37:19
11. Ted Corbitt, New York.....	2:40:57
12. Anthony Diamond, Niagara Falls, N.Y.....	2:44:34
13. Norman Tamanaha, Hawaii.....	2:45:45
14. George Norman, Toronto.....	2:49:11
15. Aldo Scandurra, New York.....	2:49:57
16. John A. Kelley, Arlington, Mass.....	2:50:25

The record for the 26-mile-385-yard race is 2 hours 18 minutes 51 seconds, set by Keizo Yamada of Japan in 1953.

## History of the Mile Run

Year	Athlete and country	Where made	Time
1865	Webster, England	England	4:44.3
1866	C. B. Lawes, England	England	4:39.0
1868	W. M. Chinnery, England	England	4:33.2
1871	W. M. Chinnery, England	England	4:31.8
1874	Walter Slade, England	England	4:24.5
1881	Walter George, England	England	4:19.8
1884	Walter George, England	England	4:18.4
1895	F. E. Bacon, England	England	4:17.0
1895	T. P. Conneff, United States	United States	4:15.6
1911	John Paul Jones, United States	United States	4:15.4
1913	John Paul Jones, United States	United States	4:14.4
1915	Norman Taber, United States	United States	4:12.6
1923	Paavo Nurmi, Finland	Sweden	4:10.4
1931	Jules Ladoumegue, France	France	4:09.2
1933	John Lovelock, New Zealand	United States	4:07.6
1934	Glenn Cunningham, United States	United States	4:06.8
1937	Sydney Wooderson, England	England	4:06.4
1942	Gunder Hagg, Sweden	Sweden	4:06.2
1942	Gunder Hagg, Sweden	Sweden	4:04.6
1943	Arne Andersson, Sweden	Sweden	4:02.6
1944	Arne Andersson, Sweden	Sweden	4:01.6
1945	Gunder Hagg, Sweden	Sweden	4:01.4
1954	Roger Bannister, England	England	3:59.4
1954	John Landy, Australia	Finland	3:58.0

## TABLE TENNIS

## United States Champions

## MEN'S SINGLES

1931	Marcus Schussheim, New York
1932	Coleman Clark, Chicago*
	Marcus Schussheim, New York*
1933	James M. Jacobson, New Rochelle, N. Y.*
	Sidney Heitner, New York*
1934	James McClure, Indianapolis*
	Sol Schiff, New York*
1935	A. Berenbaum, New York
1936	Viktor Barna, Hungary†
	Sol Schiff, New York†
1937	Laszlo Bellak, Hungary†
1938	Laszlo Bellak, Hungary
1939	James McClure, Indianapolis
1940	Louis Pagliaro, New York
1941	Louis Pagliaro, New York
1942	Louis Pagliaro, New York
1943	William Holzrichter, Chicago
1944	John Somael, New York
1945	Richard Miles, New York
1946	Richard Miles, New York
1947	Richard Miles, New York
1948	Richard Miles, New York
1949	Richard Miles, New York
1950	John Leach, England
1951	Richard Miles, New York
1952	Louis Pagliaro, New York
1953	Richard Miles, New York

## MEN'S DOUBLES

1932	James M. Jacobson-George T. Bacon, Jr., New Rochelle, N. Y.
1933	Paul Pearson-Edwin Lewis, Chicago*
	Ralph Langsam-Lloyd Waterson, New York*
1934	Samuel Silberman-Alan Lobell, New York*
	Sol Schiff, N. Y.-Manny Moskowitz, Rutherford, N. J.*
1935	A. Berenbaum, N. Y.-Edward Silverglade, Trenton, N. J.
1936	James McClure, Indianapolis-Robert Blattner, St. Louis†
	James M. Jacobson, New Rochelle, N. Y.-Sol Schiff, New York†
1937	Laszlo Bellak, Hungary-Standa Kolar, Czechoslovakia†
1938	Sol Schiff, New York-James McClure, Indianapolis
1939	Laszlo Bellak-Tibor Hazi, Hungary
1940	Sol Schiff, New York-James McClure, Indianapolis
1941	Edward Pinner-Cy Sussman, New York
1942	Edward Pinner-Cy Sussman, New York
1943	Laszlo Bellak, New York-Tibor Hazi, Philadelphia
1944	William Holzrichter, Chicago-Laszlo Bellak, N. Y.
1945	John Somael, New York-Max Hersh, Detroit
1946	Edward Pinner-Cy Sussman, New York
1947	Douglas Cartland-Arnold Fetbrod, New York
1948	Tibor Hazi, Washington-John Somael, New York
1949	Martin Reisman-Sol Schiff, New York
1950	John Leach-Jack Carrington, England
1951	M. Reisman, N. Y.-W. Holzrichter, Chicago
1952	Richard Miles-Sol Schiff, New York
1953	Richard Miles-John Somael, New York

## WOMEN'S SINGLES

1933	Jessie Purves and Mrs. Fan Pockrose*
1934	Ruth Hughes Aarons and Iris Little*
1935	Ruth Hughes Aarons
1936	Ruth Hughes Aarons†
1937	Ruth Hughes Aarons†
1938	Emily Fuller
1939	Emily Fuller
1940	Sally Green
1941	Sally Green
1942	Sally Green
1943	Sally Green
1944	Sally Green
1945	Davidia Hawthorn
1946	Bernice Charney
1947	Leah Thall
1948	Peggy McLean
1949	Mrs. Leah Thall Neuberger
1950	Mrs. Reba K. Monness
1951	Mrs. Leah Thall Neuberger
1952	Mrs. Leah Thall Neuberger
1953	Mrs. Leah Thall Neuberger

\* Co-champions. At the time there were two national associations, each with its own champion. † Open champion-ships. ‡ Closed championships.



## SWIMMING

THERE IS THE ancient tale of Leander of Abydos swimming the Hellespont nightly to call on Helen of Sestos but nobody kept the time on his trips. However, Lord Byron swam one leg of the old Leander course, Sestos to Abydos, on May 3, 1810, in 1 hour 10 minutes. The famous British poet was a noted swimmer and once, in an endurance trial at Venice, was in the water for 4 hours 10 minutes. Distance swimming was the early type of competition. Captain Matthew Webb achieved fame by being the first to swim the English Channel—Dover to Calais—in August, 1875, in 21 hours 45 minutes. Many other swimmers, men and women, have conquered the

Channel since that time. Gertrude Ederle, of New York City, was the first woman to accomplish the feat. Miss Ederle swam the Channel Aug. 6, 1926, in 14 hours 34 minutes, breaking the existing record at that time. Since then the record has been lowered by a number of men and women.

Regular competition at short as well as long distances and indoor as well as outdoor came with the development of such organizations as the Amateur Athletic Union and the building of indoor and outdoor swimming pools. Swimming has been on the Olympic program since the start of the modern Olympic Games at Athens in 1896.

## WORLD RECORDS

Source: *Official Amateur Athletic Union Swimming Rules and Records Book*. Reprinted by courtesy of the publishers, the Amateur Athletic Union of the United States, 233 Broadway, New York, N. Y., and R. M. Ritter, Vice-President, International Amateur Swimming Federation.

Accepted by the International Amateur Swimming Federation as of August 20, 1953.

### MEN

#### FREE STYLE

Distance	Time	Course	Holder	Home country	Where made	Date
100 yd.....	49.2 s.....	25 yd.....	Richard Cleveland	U. S.....	Columbus, Ohio.....	Feb. 23, 1952
100 m.....	55.4 s.....	25 m.....	Alan Ford	U. S.....	New Haven.....	June 29, 1948
200 m.....	2 m. 4.6 s.....	25 yd.....	J. B. Marshall	Australia.....	New Haven.....	Mar. 31, 1950
220 yd.....	2 m. 5.5 s.....	25 yd.....	J. B. Marshall	Australia.....	New Haven.....	Mar. 31, 1950
400 m.....	4 m. 26.9 s.....	25 yd.....	J. B. Marshall	Australia.....	New Haven.....	Mar. 24, 1951
440 yd.....	4 m. 28.1 s.....	25 yd.....	J. B. Marshall	Australia.....	New Haven.....	Mar. 24, 1951
500 yd.....	5 m. 12 s.....	25 yd.....	J. B. Marshall	Australia.....	New Haven.....	June 30, 1950
500 m.....	5 m. 43.7 s.....	25 yd.....	J. B. Marshall	Australia.....	New Haven.....	Feb. 17, 1951
800 m.....	9 m. 30.7 s.....	100 m.....	Ford H. Konno	U. S.....	Honolulu.....	July 7, 1951
880 yd.....	9 m. 37.5 s.....	55 yd.....	J. B. Marshall	Australia.....	Seattle.....	July 23, 1950
1,500 m.....	18 m. 19 s.....	50 m.....	H. Furuhashi	Japan.....	Los Angeles.....	Aug. 16, 1949
1 mi.....	19 m. 49.4 s.....	55 yd.....	J. B. Marshall	Australia.....	New Haven.....	July 7, 1950

#### Relays

400 yd.....	3 m. 21.6 s.....	25 yd.....	Yale University	U. S.....	New Haven.....	Feb. 17, 1951
(R. Thoman, D. Sheff, W. Farnsworth, R. Reid)						
400 m.....	3 m. 47.9 s.....	25 m.....	Yale University	U. S.....	New Haven.....	Mar. 19, 1951
(R. Thoman, D. Sheff, W. Farnsworth, R. Reid)						
800 yd.....	7 m. 40.5 s.....	25 yd.....	Yale University	U. S.....	New Haven.....	Feb. 16, 1952
(W. Moore, J. McLane, D. Sheff, F. Chamberlain)						
800 m.....	7 m. 39.9 s.....	25 yd.....	Yale University	U. S.....	New Haven.....	Feb. 14, 1953
(W. Moore, J. McLane, M. Smith, D. Sheff)						

#### BREAST STROKE

100 yd.....	58.5 s.....	25 yd.....	Keith E. Carter	U. S.....	Lafayette, Ind.....	May 5, 1949
100 m.....	1 m. 11.2 s.....	25 m.....	V. Minachkin	U.S.S.R.....	Leningrad.....	Feb. 22, 1953
200 yd.....	2 m. 12.9 s.....	25 yd.....	John Davies	Australia.....	Princeton, N. J.....	Mar. 28, 1952
200 m.....	2 m. 37.4 s.....	25 m.....	Knud Gleie	Denmark.....	Copenhagen.....	Feb. 14, 1953
220 yd.....	2 m. 38.8 s.....	25 m.....	Knud Gleie	Denmark.....	Odense.....	Feb. 24, 1953

#### BACKSTROKE

100 yd.....	56.1 s.....	25 yd.....	Yoshinobu Oyakawa	U. S.....	Columbus.....	Apr. 1, 1953
100 m.....	1 m. 3.3 s.....	25 m.....	G. Bozon	France.....	Troyes.....	Dec. 26, 1952
150 yd.....	1 m. 29.9 s.....	25 yd.....	Allen M. Stack	U. S.....	New Haven, Conn.....	May 5, 1949
200 m.....	2 m. 18.3 s.....	25 m.....	G. Bozon	France.....	Algiers.....	June 26, 1953

#### BUTTERFLY

100 m.....	1 m. 4.3 s.....	33 1/3 m.....	G. Tumpek	Hungary.....	Budapest.....	May 31, 1953
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#### INDIVIDUAL MEDLEY

400 m.....	5 m. 35.6 s.....	25 m.....	M. Lusien	France.....	Troyes.....	Apr. 24, 1953
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**(Back, breast, free style, butterfly)**

400 yd.....	3 m. 57.1 s.....	25 yd.....	Yale University.....	U. S.....	New Haven.....	Feb. 23, 1953
			(R. Thoman, D. O'Connor, S. Smith, K. Donovan)			
400 m.....	4 m. 24.8 s.....	25 m.....	National Team.....	U.S.S.R.....	Moscow.....	May 13, 1953
			(V. Lopatine, V. Minachkin, P. Skriptchankov, L. Balandine)			

**WOMEN****FREE STYLE**

Distance	Time	Course	Holder	Home country	Where made	Date
100 yd.....	58.2 s.....	25 m.....	Greta Andersen.....	Denmark.....	Svendborg.....	Feb. 24, 1949
100 m.....	1 m. 4.6 s.....	25 m.....	W. Den Ouden.....	Netherlands.....	Amsterdam.....	Feb. 27, 1936
200 m.....	2 m. 21.7 s.....	25 m.*.....	R. Hveger.....	Denmark.....	Aarhus.....	Sept. 11, 1938
220 yd.....	2 m. 22.6 s.....	25 yd.*.....	R. Hveger.....	Denmark.....	Copenhagen.....	Apr. 23, 1939
400 m.....	5 m. 0.1 s.....	25 m.....	R. Hveger.....	Denmark.....	Copenhagen.....	Sept. 15, 1940
440 yd.....	5 m. 7.9 s.....	25 yd.....	Ann Curtis.....	U. S.....	Seattle, Wash.....	May 2, 1947
500 yd.....	5 m. 53 s.....	25 m.....	R. Hveger.....	Denmark.....	Copenhagen.....	Apr. 19, 1942
500 m.....	6 m. 27.4 s.....	25 m.....	R. Hveger.....	Denmark.....	Copenhagen.....	Feb. 11, 1940
800 m.....	10 m. 42.4 s.....	50 m.....	V. Gyenge.....	Hungary.....	Budapest.....	June 28, 1953
880 yd.....	11 m. 8.6 s.....	50 yd.*.....	Ann Curtis.....	U. S.....	San Francisco.....	July 30, 1944
1,500 m.....	20 m. 57 s.....	50 m.*.....	R. Hveger.....	Denmark.....	Copenhagen.....	Aug. 20, 1941
1 mi.....	22 m. 51.6 s.....	55 yd.....	J. J. Davies.....	Australia.....	Sydney.....	Mar. 13, 1953

**Relays**

400-yd.....	4 m. 4.9 s.....	25 yd.....	Community Builders S. C.....	U. S.....	Daytona Beach.....	Apr. 3, 1953
			(S. Donahue, J. LaVine, J. Alderson, J. Calderini)			
400-m.....	4 m. 24.4 s.....	50 m.....	National Team.....	Hungary.....	Helsinki.....	Aug. 1, 1952
			(I. Novak, J. Temes, E. Novak, E. Szekely)			

\* Salt water.

**BREAST STROKE**

100 yd.....	1 m. 9.2 s.....	25 yd.....	N. van Vliet.....	Netherlands.....	Hilversum.....	May 4, 1947
100 m.....	1 m. 16.9 s.....	25 m.....	E. Szekely.....	Hungary.....	Moscow.....	May 9, 1951
200 yd.....	2 m. 34 s.....	25 m.....	E. Novak.....	Hungary.....	Ozd, Hungary.....	Dec. 30, 1950
200 m.....	2 m. 48.5 s.....	25 m.....	E. Novak.....	Hungary.....	Moscow.....	May 5, 1951

**BACKSTROKE**

100 yd.....	1 m. 4.6 s.....	25 m.....	G. Wielema.....	Netherlands.....	Hilversum.....	Mar. 13, 1950
100 m.....	1 m. 10.9 s.....	25 m.....	Cor Kint.....	Netherlands.....	Rotterdam.....	Sept. 22, 1939
150 yd.....	1 m. 40.4 s.....	25 m.....	G. Wielema.....	Netherlands.....	Hilversum.....	Apr. 15, 1951
200 m.....	2 m. 35.3 s.....	25 m.....	G. Wielema.....	Netherlands.....	Hilversum.....	Apr. 2, 1950

**INDIVIDUAL MEDLEY**

400 m.....	5 m. 50.4 s.....	33 1/3 m.....	E. Szekely.....	Hungary.....	Budapest.....	Apr. 10, 1953
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**MEDLEY RELAY****(Back, breast, free style)**

300 yd.....	3 m. 18.1 s.....	25 yd.....	Lafayette S. C.....	U. S.....	Lafayette, Ind.....	May 8, 1952
			(S. Donahue, C. Pence, B. Mullen)			
300 m.....	3 m. 35.9 s.....		National Team.....	Netherlands.....	Rotterdam.....	Dec. 2, 1950
			(G. Wielema, N. Garritsen, I. Schuhmacher)			

**(Back, breast, free style, butterfly)**

400 m.....	5 m. 10.8 s.....	50 m.....	National Team.....	Hungary.....	Budapest.....	July 24, 1953
			(M. Hunyadi, K. Killermann, E. Szekely, V. Gyenge)			

**16-Year-Old First in Swim**

Marilyn Bell, a 16-year-old Toronto high school student, became the first person to swim Lake Ontario when she won the 32-mile race sponsored by the Canadian National Exhibition on Sept. 9, 1954. It took Miss Bell 20 hours 56 minutes to accomplish the crossing from Youngstown, N. Y., to Toronto.

Florence Chadwick, noted distance swimmer from San Diego, Calif., was pulled out of the water after going 15 miles and Mrs. Winnie Roach Leuszler of St. Thomas, Ont., covered about 23 miles before she was taken from the water.

**Mexico Captures Tuna Tourney**

The Mexican team won the 1954 international tuna tournament for the Alton B. Sharp Trophy. Of the 20 bluefins caught during the annual event off Wedgeport, Nova Scotia, 5 were landed by the winners. The haul was the largest since 1949, when 72 were caught. Joe Gale of New York helped the United States finish second by landing a 783-pounder.

**POINT SCORE**

Mexico.....	2,753½	France.....	884½
United States.....	2,109½	Cuba.....	810
Argentina.....	1,418½	British Empire.....	724
Venezuela.....	1,249½		

## POLO

**P**OLO originated "somewhere east of Suez" but exactly where never has been determined. There is pictorial proof that it was played many centuries ago in Persia, Japan, China and Tibet, but it reached England by way of a border tribe in India known as the Manipuri. British army officers in India, about 1860, found the Manipuri playing polo and learned the game from them. The fact that the Manipuri used small native horses—they had no others—was the reason for the early height limit (14 hands) on polo mounts, from which arose the custom of calling them "polo ponies," which was abandoned in 1919.

In 1869 some officers of the 10th Hussars, returning from India, introduced the game in England and informal games were played with as many as eight players on a side. Formal competition at Hurlingham, the great shrine of the game, began in 1876 with five players on a side, which

number was cut to four in 1882. In 1884 an outstanding English player by the name of John Watson invented the backhand stroke and much improved the tactics of the game.

James Gordon Bennett, Jr., noted American newspaper owner and editor, saw polo at Hurlingham in 1875, brought the implements to this country, had a carload of cow ponies sent up from Texas and promoted a game that was played indoors at the Dickel Riding Academy at Fifth Avenue and 39th Street, New York City, in 1876. Polo moved outdoors to the Jerome Park race course and other suitable places soon after. One field on which it was played, at Fifth Avenue and 110th Street, was taken over by the New York baseball team in the National League and that is why the field on which the "Giants" play ball, although there since have been two changes in site, still is called "the Polo Grounds."

## Polo Statistics

Source: United States Polo Association.

### INTERNATIONAL MATCHES

#### Great Britain vs. United States

- |      |   |      |   |
|------|---|------|---|
| 1886 | Won by Great Britain (10-4, 14-2) at Newport, R. I. Great Britain: No. 1, Capt. T. Hone; No. 2, Hon. R. Lawley; No. 3, Capt. Malcolm Little; Back, John Watson. United States: No. 1, Winthrop K. Thorne; No. 2, R. Belmont; No. 3, Foxhall P. Keene; Back, Thomas Hitchcock.   | 1911 | Won by United States (4½-3, 4½-3½) at Meadow Brook. United States: No. 1, Lawrence Waterbury; No. 2, J. M. Waterbury, Jr.; No. 3, Harry Payne Whitney; Back, Devereux Milburn. Great Britain: No. 1, Capt. Leslie St. G. Cheape; No. 2, A. Noel Edwards; No. 3, Capt. J. Hardress Lloyd; Back, Capt. Herbert H. Wilson.   |
| 1902 | Won by Great Britain (1-2, 6-1, 7-1) at Hurlingham. Great Britain: No. 1, Cecil P. Nickalls; No. 2, P. W. Nickalls and F. M. Freake; No. 3, Walter Buckmaster and George A. Miller; Back, Charles D. Miller and Walter Buckmaster. United States: No. 1, R. L. Agassiz and J. M. Waterbury, Jr.; No. 2, J. E. Cowdin and Lawrence Waterbury; No. 3, Foxhall P. Keene; Back, Lawrence Waterbury and R. L. Agassiz. | 1913 | Won by United States (5½-3, 4½-4¼) at Meadow Brook. United States: No. 1, Lawrence Waterbury and Louis E. Stoddard; No. 2, J. M. Waterbury, Jr., and Lawrence Waterbury; No. 3, Harry Payne Whitney; Back, Devereux Milburn. Great Britain: No. 1, Capt. Leslie St. G. Cheape; No. 2, A. Noel Edwards and F. M. Freake; No. 3, Capt. R. G. Ritson; Back, Capt. Vivian N. Lockett. |
| 1909 | Won by United States (9-5, 8-2) at Hurlingham. United States: No. 1, Lawrence Waterbury; No. 2, J. M. Waterbury, Jr.; No. 3, Harry Payne Whitney; Back, Devereux Milburn. Great Britain: No. 1, Capt. Herbert H. Wilson and Harry Rich; No. 2, F. M. Freake; No. 3, P. W. Nickalls; Back, Lord Wodehouse and Capt. J. Hardress Lloyd.   | 1914 | Won by Great Britain (8½-3, 4-2¾) at Meadow Brook. Great Britain: No. 1, Capt. H. A. Tomkinson; No. 2, Capt. Leslie St. G. Cheape; No. 3, Maj. F. W. Barrett; Back, Capt. Vivian N. Lockett. United States: No. 1, Rene LaMontagne; No. 2, J. M. Waterbury, Jr.; No. 3, Devereux  |



Milburn and Lawrence Waterbury; Back, Lawrence Waterbury and Devereux Milburn.

- 1921 Won by United States (11-4, 10-6) at Hurlingham. United States: No. 1, Louis E. Stoddard; No. 2, Thomas Hitchcock, Jr.; No. 3, J. Watson Webb; Back, Devereux Milburn. Great Britain: No. 1, Lt. Col. H. A. Tomkinson; No. 2, Maj. F. W. Barrett; No. 3, Lord Wodehouse; Back, Maj. Vivian N. Lockett.
- 1924 Won by United States (16-5, 14-5) at Meadow Brook. United States: No. 1, J. Watson Webb; No. 2, Thomas Hitchcock, Jr.; No. 3, Malcolm Stevenson and Robert E. Strawbridge Jr.; Back, Devereux Milburn. Great Britain: No. 1, Maj. T. W. Kirkwood and Lt. Col. T. P. Melvill; No. 2, Maj. F. W. Hurdall and Maj. G. H. Phipps-Hornby; No. 3, Maj. E. G. Atkinson; Back, Lewis L. Lacey.
- 1927 Won by United States (13-3, 8-5) at Meadow Brook. United States: No. 1, J. Watson Webb; No. 2, Thomas Hitchcock, Jr.; No. 3, Malcolm Stevenson; Back, Devereux Milburn. Great Britain: No. 1, Capt. Claude E. Pert and Capt. R. George; No. 2,

Maj. Austin H. Williams and Capt. J. P. Dening; No. 3, Capt. C. T. I. Roark; Back, Maj. E. G. Atkinson.

- 1930 Won by United States (10-5, 14-9) at Meadow Brook. United States: No. 1, Eric Pedley; No. 2, Earle A. S. Hopping; No. 3, Thomas Hitchcock, Jr.; Back, Winston F. C. Guest. Great Britain: No. 1, Gerald Balding; No. 2, Lewis L. Lacey; No. 3, Capt. C. T. I. Roark; Back, Humphrey P. Guinness.
- 1936 Won by United States (10-9, 8-6) at Hurlingham. United States: No. 1, Eric Pedley; No. 2, Michael G. Phipps; No. 3, Stewart B. Iglehart; Back, Winston F. C. Guest. Great Britain: No. 1, Hesketh H. Hughes; No. 2, Gerald Balding; No. 3, Eric H. Tyrrell-Martin; Back, Humphrey P. Guinness.
- 1939 Won by United States (11-7, 9-4) at Meadow Brook. United States: No. 1, Michael G. Phipps; No. 2, Thomas Hitchcock, Jr.; No. 3, Stewart B. Iglehart; Back, Winston F. C. Guest. Great Britain: No. 1, Robert Skene; No. 2, Aidan Roark; No. 3, Gerald Balding; Back, Eric H. Tyrrell-Martin.

### Argentina vs. United States

- 1928 Won by United States (7-6, 7-10, 13-7) at Meadow Brook. United States: No. 1, W. A. Harriman; No. 2, Thomas Hitchcock, Jr.; and E. A. S. Hopping; No. 3, Malcolm Stevenson and Thomas Hitchcock, Jr.; Back, Winston F. C. Guest. Argentina: No. 1, Arturo Kenny; No. 2, J. D. Nelson; No. 3, J. B. Miles; Back, Lewis L. Lacey.
- 1932 Won by United States (9-6, 7-8, 12-10) at Buenos Aires. United States: No. 1, Michael G. Phipps; No. 2, Elmer J. Boeseke, Jr.; No. 3, Winston F. C. Guest; Back, William Post, 2d. Argentina: No. 1, Arturo Kenny; No. 2, J. D. Nelson and Martin Reynal; No. 3, José Reynal; Back, Manuel Andrada.

- 1936 Won by Argentina (21-9, 8-4) at Meadow Brook. Argentina: No. 1, Luis Duggan; No. 2, Roberto Cavanaugh; No. 3, Andres Gazzottli; Back, Manuel Andrada. United States: No. 1, G. H. Bostwick; No. 2, Gerald Balding; No. 3, Thomas Hitchcock, Jr.; Back, John Hay Whitney.
- 1950 Won by Argentina (14-10, 11-7) at Buenos Aires. Argentina: No. 1, Juan Cavanagh; No. 2, Roberto Cavanagh; No. 3, Enrique Alberdi; Back, Juan Carlos Alberdi. United States: No. 1, Delmar Carroll; No. 2, Peter Perkins; No. 3, George K. Oliver; Back, Lewis Smith.

### Adcock Sets Slugging Record

Joe Adcock of the Milwaukee Braves set two major-league single-game batting records and tied two when he hit four home runs and a double in five trips to the plate against the Brooklyn Dodgers at Ebbets Field on July 31, 1954. The first baseman's 18 total bases was one over the previous mark and his 13 extra bases also bettered the former record by one. The four homers tied the mark first set by Bobby Lowe of the Boston Nationals in 1894 and since equaled by several players. Adcock's 5 extra-base hits also tied the record.

### Musial Sets Mark for Homers

Stan Musial of the St. Louis Cardinals set a record for the majors when he hit five home runs against the New York Giants in a double-header at Busch Stadium on May 2, 1954. The star outfielder, who also tied the mark of five homers for two consecutive games, walloped three in the opener and two in the afterpiece. The Cardinals won the first game, 10-6, and the Giants the second, 9-7.

## NATIONAL OPEN POLO CHAMPIONS

Not held from 1905 to 1909, inclusive; 1911, 1915, 1917, 1918, and from 1942 to 1945, inclusive.

## 1904—WANDERERS

- 1—C. R. Snowden
- 2—J. E. Cowdin
- 3—J. M. Waterbury, Jr.
- Back—L. Waterbury

## 1910—RANELAGH

- 1—R. N. Grenfell
- 2—F. Grenfell
- 3—Earl of Rocksavage
- Back—F. A. Gill

## 1912—COOPERSTOWN

- 1—F. S. von Stade
- 2—C. C. Rumsey
- 3—C. P. Beadleston
- Back—M. Stevenson

## 1913—COOPERSTOWN

- 1—F. S. von Stade
- 2—C. C. Rumsey
- 3—C. P. Beadleston
- Back—M. Stevenson

## 1914—MEADOW BROOK

- MAGPIES
- 1—N. L. Tilney
- 2—J. W. Webb
- 3—W. G. Loew
- Back—H. Phipps

## 1916—MEADOW BROOK

- 1—H. Phipps
- 2—C. C. Rumsey
- 3—W. G. Loew
- Back—D. Milburn

## 1919—MEADOW BROOK

- 1—F. H. Prince, Jr.
- 2—J. W. Webb
- 3—F. S. von Stade
- Back—D. Milburn

## 1920—MEADOW BROOK

- 1—F. S. von Stade
- 2—J. W. Webb
- 3—R. E. Strawbridge, Jr.
- Back—D. Milburn

## 1921—GREAT NECK

- 1—L. E. Stoddard
- 2—R. Wanamaker, II
- 3—J. W. Webb
- Back—R. E. Strawbridge, Jr.

## 1922—ARGENTINE

- 1—J. B. Miles
- 2—J. D. Nelson
- 3—D. B. Miles
- Back—L. L. Lacey

## 1923—MEADOW BROOK

- 1—R. Belmont
- 2—T. Hitchcock, Jr.
- 3—R. E. Strawbridge, Jr.
- Back—D. Milburn

## 1924—MIDWICK

- 1—E. G. Miller
- 2—E. L. Pedley
- 3—A. P. Perkins
- Back—C. F. Burke

## 1925—ORANGE COUNTY

- 1—W. A. Harriman
- 2—J. W. Webb
- 3—M. Stevenson
- Back—J. C. Cowdin

## 1926—HURRICANES

- 1—S. Sanford
- 2—E. L. Pedley
- 3—Capt. C. T. I. Roark
- Back—R. E. Strawbridge, Jr.

## 1927—SANDS POINT

- 1—W. A. Harriman
- 2—T. Hitchcock, Jr.
- 3—J. C. Cowdin
- Back—L. E. Stoddard

## 1928—MEADOW BROOK

- 1—C. V. Whitney
- 2—W. F. C. Guest
- 3—J. B. Miles
- Back—M. Stevenson

## 1929—HURRICANES

- 1—S. Sanford
- 2—Capt. C. T. I. Roark
- 3—J. W. Webb
- Back—R. E. Strawbridge, Jr.

## 1930—HURRICANES

- 1—S. Sanford
- 2—E. L. Pedley
- 3—Capt. C. T. I. Roark
- Back—R. E. Strawbridge, Jr.

## 1931—SANTA PAULA

- 1—A. Gazzotti
- 2—José Reynal
- 3—Juan Reynal
- Back—M. Andrada

## 1932—TEMPLETON

- 1—M. G. Phipps
- 2—W. F. C. Guest
- 3—S. B. Iglehart
- Back—R. R. Guest

## 1933—AURORA

- 1—S. H. Knox
- 2—J. P. Mills
- 3—E. T. Gerry
- Back—E. J. Boeseke, Jr.

## 1934—TEMPLETON

- 1—M. G. Phipps
- 2—W. F. C. Guest
- 3—S. B. Iglehart
- Back—R. R. Guest

## 1935—GREENTREE

- 1—G. H. Bostwick
- 2—T. Hitchcock, Jr.
- 3—G. Balding
- Back—J. H. Whitney

## 1936—GREENTREE

- 1—G. H. Bostwick
- 2—G. Balding
- 3—T. Hitchcock, Jr.
- Back—J. H. Whitney

## 1937—OLD WESTBURY

- 1—M. G. Phipps
- 2—C. Smith
- 3—S. B. Iglehart
- Back—C. V. Whitney

## 1938—OLD WESTBURY

- 1—M. G. Phipps
- 2—C. Smith
- 3—S. B. Iglehart
- Back—C. V. Whitney

## 1939—BOSTWICK FIELD

- 1—G. H. Bostwick
- 2—R. L. Gerry, Jr.
- 3—E. T. Gerry
- Back—E. H. Tyrrell-Martin

## 1940—AKNUSTI

- 1—G. S. Smith
- 2—R. L. Gerry, Jr.
- 3—E. T. Gerry
- Back—A. L. Corey, Jr.

## 1941—GULF STREAM

- 1—J. H. A. Phipps
- 2—M. G. Phipps
- 3—C. S. von Stade
- Back—A. L. Corey, Jr.

## 1946—HERRADURA

- 1—Gabriel Gracida
- 2—Guillermo Gracida
- 3—Alejandro Gracida
- Back—José Gracida

## 1947—OLD WESTBURY

- 1—P. Silvero
- 2—C. C. Combs
- 3—S. B. Iglehart
- Back—G. Oliver

## 1948—HURRICANES

- 1—L. Sheerin
- 2—P. Perkins
- 3—C. Smith
- Back—S. Sanford

## 1949—HURRICANES

- 1—L. Sheerin
- 2—R. Cavanaugh
- 3—C. Smith
- Back—S. Sanford

## 1950—BOSTWICK FIELD

- 1—G. H. Bostwick
- 2—George Oliver
- 3—A. L. Corey, Jr.
- Back—D. Milburn, Jr.

## 1951—MILWAUKEE

- 1—Pedro Silvero
- 2—Peter Perkins
- 3—George Oliver
- Back—Bob Uihlein

## 1952—BEVERLY HILLS

- 1—Bob Fletcher
- 2—Tony Vein
- 3—Bob Skene
- Back—Carlton Beal

## 1953—MEADOW BROOK

No. 1, Henry Lewis III; No. 2, Philip Iglehart; No. 3, Alan L. Corey, Jr.; Back, George H. Bostwick.

## U. S. Horse Wins English Derby

When Never Say Die, owned by Robert Sterling Clark of New York and Upperville, Va., won the 175th Epsom Derby at Epsom Downs, England, the 3-year-old colt became the first American-owned horse to take the historic race since Pierre Lorillard's Iroquois scored in 1881.

## Throwing Mark Held by Grate

When Don Grate, an outfielder with Chattanooga of the Southern Association threw a baseball 434 feet 1 inch on Sept. 7, 1952, he broke a record that had been in the books for 42 years. The previous mark of 426 feet 9½ inches was made by Sheldon Lejeune in 1910. Grate increased his record to 443 feet 3½ inches at Chattanooga in 1953.

## MOTORBOATING

SINCE the source of power—the internal combustion engine—is the same in the motorboat as it is in the automobile, the history of motorboat racing parallels that of auto racing. There was a sporting risk in driving the early power boats. As soon as they began to show a degree of dependability, there came the informal rivalries of the rivers and lakes. These led to the formal contests of speed and endurance

over marked courses under the control of the American Power Boat Association. The races were severe tests of all parts of power boats and what was learned in the annual Gold Cup competition, which started in 1904, caused a great improvement in the designing of engines and hulls. The development of the outboard motor opened up another branch of power boat competition of wide popularity.

### Motorboating Statistics

Source: American Power Boat Association and *Motor Boating Magazine*.

#### GOLD CUP WINNERS

Beginning with 1922 the race for the American Power Boat Association Gold Cup was open only to displacement boats of over 25 feet in length and powered with motors of not more than 625 inches piston displacement.

In 1946 the rules were liberalized to encourage the entry of smaller, less expensive craft. Boats now are required to be between 10 and 40 feet in length, with horsepower unlimited.

Year	Sponsor	Winner and owner	Time of best heat	Best heat speed m.p.h.
1904	Columbia Yacht Club.....	STANDARD, C. C. Riotte.....	1:33:30	23.6
1904	Columbia Y. C.....	VINGT-ET-UN II, W. Sharpe Kilmer.....	1:27:03	25.3
1905	Chippewa Bay Y. C.....	CHIP, J. Wainwright.....	1:52:38	15.9
1906	Chippewa Bay Y. C.....	CHIP II, J. Wainwright.....	1:27:01	20.6
1907	Chippewa Bay Y. C.....	CHIP II, J. Wainwright.....	1:26:43	20.8
1908	Chippewa Bay Y. C.....	DIXIE II, E. J. Schroeder.....	0:58:13	30.9
1909	Thousand Islands Y. C.....	DIXIE II, E. J. Schroeder.....	0:58:25	32.9
1910	Thousand Islands Y. C.....	DIXIE III, F. K. Burnham.....	0:57:14	33.6
1911	Frontenac Y. C.....	MIT II, J. H. Hayden.....	0:53:31	36.1
1912	Thousand Islands Y. C.....	P. D. Q. II, Alfred G. Miles.....	0:44:59	44.5
1913	Thousand Islands Y. C.....	ANKLE DEEP, C. S. Mankowski.....	0:41:03	50.49
1914	Lake George Reg. Assn.....	BABY SPEED DEMON II, Paula Blackton.....	0:42:41	48.5
1915	L. I. Sound P. B. A.....	MISS DETROIT, Miss Detroit P. B. A.....	0:41:21	49.7
1916	Miss Detroit P. B. A.....	MISS MINNEAPOLIS, Miss Minneapolis B. A.....	0:52:12	36.8
1917	Miss Minneapolis B. A.....	MISS DETROIT II, Garfield A. Wood.....	0:36:47	56.5
1918	Detroit Y. C.....	MISS DETROIT III, Detroit Yachtsmen.....	0:34:36	52.1
1919	Detroit Y. C.....	MISS DETROIT III, Garfield A. Wood.....	0:32:37	56.3
1920	Detroit Y. C.....	MISS AMERICA, Garfield A. Wood.....	0:25:44	70.0
1921	Detroit Y. C.....	MISS AMERICA, Garfield A. Wood.....	0:32:52	56.5
1922	Detroit Y. C.....	PACKARD-CHRISCRAFT, J. G. Vincent.....	0:44:17.77	40.6
1923	Detroit Y. C.....	PACKARD-CHRISCRAFT, J. G. Vincent.....	0:40:30	44.4
1924	Detroit Y. C.....	BABY BOOTLEGGGER, Caleb Bragg.....	0:33:48.61	46.4
1925	Columbia Y. C.....	BABY BOOTLEGGGER, Caleb Bragg.....	0:37:11	48.4
1926	Columbia Y. C.....	GREENWICH FOLLY, G. H. Townsend.....	0:36:34	49.22
1927	Indian Harbor Y. C.....	GREENWICH FOLLY, G. H. Townsend.....	0:35:18	50.99
1929	Red Bank & Columbia Y. C.....	IMP, R. F. Hoyt.....	0:35:39.04	50.489
1930	Red Bank & Columbia Y. C.....	HOTSY TOTS, V. Kliersath.....	0:32:07	56.05
1931	Montauk Y. C.....	HOTSY TOTS, V. Kliersath-R. Hoyt.....	0:32:46.47	54.92
1932	Montauk Y. C.....	DELPHINE IV, Horace E. Dodge.....	0:30:24	59.21
1933	Detroit Y. C.....	EL LAGARTO, G. Reis.....	0:29:34.4	60.866
1934	Lake George Club.....	EL LAGARTO, G. Reis.....	0:31:00.4	58.06
1935	Lake George Club.....	EL LAGARTO, G. Reis.....	0:31:16	57.582
1936	Lake George Club.....	IMPSHI, Horace E. Dodge.....	0:38:13	47.120
1937	Detroit Y. C.....	NOTRE DAME, Herbert Mendelson.....	0:26:13.32	68.645
1938	Detroit Y. C.....	ALAGI, Theo Rossi.....	0:27:14.38	66.080
1939	Miss Detroit P. B. A.....	MY SIN, Z. G. Simmons, Jr.....	0:26:50.73	67.05
1940	Indian Harbor Y. C.....	HOTSY TOTS III, Sidney Allen.....	0:36:04.3	51.316
1941	Red Bank Reg. Assn.....	MY SIN, Z. G. Simmons, Jr.....	—	52.509
1946	Detroit, Y. C.....	TEMPO VI, Guy Lombardo.....	0:25:23.74	70.878
1947	South Shore Y. C.....	MISS PEPS V, Walter, Roy and Russell Dossin.....	0:31:33.6	57.02
1948	Detroit Y. C.....	MISS GREAT LAKES, Albin Fallon.....	0:31:19.82†	57.452†
1949	Detroit River R. A.....	MY SWEETIE, Bill Cantrell.....	0:22:53.26	78.645
1950	Detroit River R. A.....	SLO-MO-SHUN IV, Stanley S. Sayres.....	0:22:15.03	83.892
1951	Seattle Y. C.....	SLO-MO-SHUN V, Stanley S. Sayres.....	0:19:37	91.766
1952	Seattle Y. C.....	SLO-MO-SHUN IV, Stanley S. Sayres.....	0:17:49.05‡	101.024‡
1953	Seattle Y. C.....	SLO-MO-SHUN IV, Stanley S. Sayres.....	0:18:53.64	95.268

\* Only contestant. † Made by SUCH CRUST. ‡ Made by MISS PEPSI.



## RECORDS FOR ONE-MILE STRAIGHTAWAY

(Through Sept. 1, 1954)

Source: Clarence E. Lovejoy, Boating Editor, *The New York Times*, and Educational Consultant, 1475 Broadway, New York 36, N. Y.

Class	Speed m.p.h.	Date	Place	Boat and owner or driver
Unlimited hydroplane.....	178.497	7/7/52	Seattle, Wash.....	SLO-MO-SHUN IV, Stanley Sayres
7 Litre.....	102.278	9/26/53	New Martinsville, W. Va.....	WILDCATTER B. G. Bartlett, Sr.
266 cu. in. hydroplane.....	121.703	11/11/52	Salton Sea, Calif.....	GUESS WHO, Bob Sykes
225 cu. in. hydroplane.....	107.238	8/9/54	Seattle, Wash.....	FLYING SAUCER, Richard Hallett
135 cu. in. hydroplane.....	78.388	8/9/54	Seattle, Wash.....	JERKY, Bob Boehm
135 cu. in. hydroplane.....	101.254	10/19/53	Salton Sea, Calif.....	CUMON BABY, Duane Allen
91 cu. in. hydroplane.....	78.202	12/28/53	Miami, Fla.....	DRAGON, Sam Crooks
48 cu. in. hydroplane.....	84.517	8/9/54	Seattle, Wash.....	TINKERTOY, Duane Allen
Pacific One-Design hydro.....	62.745	10/16/53	Salton Sea, Calif.....	LITTLE BEAVER, Marion Beaver
Cracker Box inb. runabout.....	72.165	10/19/53	Salton Sea, Calif.....	HOT CINDERS, Bob Patterson
Jersey Speed Skiff.....	49.611	8/3/52	Cambridge, Md.....	JO-CAROL, Tom Dan
Class M out. hydroplane.....	42.303	3/21/49	Lake Alfred, Fla.....	Eleanor Shakeshaft
Class A out. hydroplane.....	61.069	8/9/54	Seattle, Wash.....	GOTTA GO, Jack Leek
Class B out. hydroplane.....	64.296	8/9/54	Seattle, Wash.....	S-18, Bill Tenney
Class C out. hydroplane.....	68.631	8/9/54	Seattle, Wash.....	S-111, Bill Tenney
Class C ser. out. hydro.....	57.678	8/9/54	Seattle, Wash.....	HUBBA HUBBA, Lightle Samsel
Class C racing out. runabout.....	63.570	8/9/54	Seattle, Wash.....	CROSSWIND, Bud Wiget
Class C ser. out. runabout.....	51.613	5/21/49	San Diego, Calif.....	MISS SANTA BARBARA, Tom Newton
Class F rac. out. runabout.....	71.993	8/10/53	Seattle, Wash.....	FLYING HIGH, Bud Wiget
Class B rac. inb. runabout.....	63.878	8/9/54	Seattle, Wash.....	CROSSFIRE, Bud Wiget
Class E rac. inb. runabout.....	69.943	8/9/54	Seattle, Wash.....	LIL BEE, Ernest Rose
Class E rac. inb. runabout.....	80.743	8/3/52	Cambridge, Md.....	SLIVER, Al Endres
Class E ser. inb. runabout.....	56.427	8/23/53	Bush River, Md.....	VAUGHN FRANCIS, Enoch Walker
Class F ser. inb. runabout.....	57.280	7/8/51	Bush River, Md.....	RED EAGLE, Edison Hedges
Class K rac. inb. runabout.....	69.438	9/8/50	Ocean City, N. J.....	BEAVER III, Gene Gatter

## RECORDS IN COMPETITION

Class	Dist.	Speed m.p.h.	Date	Place	Boat and driver
Unlimited.....	10(n)	111.7423	8/12/51	Seattle, Wash.....	SLO-MO-SHUN IV, Lou Fageol
Gold Cup lap.....	3	108.663	8/4/51	Seattle, Wash.....	SLO-MO-SHUN V, Lou Fageol
Gold Cup heat.....	30	101.024	8/9/52	Seattle, Wash.....	MISS PEPSI, Chuck Thompson
Gold Cup race.....	90	99.784	8/7/54	Seattle, Wash.....	SLO-MO-SHUN V, Lou Fageol
Harmsworth lap.....	5(n)	102.676	9/2/50	Seattle, Wash.....	SLO-MO-SHUN IV, Lou Fageol
Harmsworth heat.....	40(n)	100.181	9/2/50	Detroit, Mich.....	SLO-MO-SHUN IV, Lou Fageol
Harmsworth race.....	80(n)	95.623	9/2/50	Detroit, Mich.....	SLO-MO-SHUN IV, Lou Fageol
President's Cup heat.....	15	93.918	9/20/53	Washington, D.C.....	SUCH CRUST III, C. Thompson
Natl. Sweepstakes heat.....	10	87.464	8/14/49	Red Bank, N. J.....	MY SWEETIE, W. J. Cantrell
Silver Cup heat.....	10(n)	107.394	9/4/50	Detroit, Mich.....	MISS PEPSI, Chuck Thompson
Steel Cup heat.....	15	67.500	5/20/50	Pittsburgh, Pa.....	SUCH CRUST II, Dan Arena
Harbourn Trophy.....	30	64.400	9/11/49	New York, N. Y.....	ETTA, George Sarant
266 cu. in. hydro.....	5	68.123	9/6/48	Detroit, Mich.....	Z-Z-Zip, Sid Street
225 cu. in. hydro.....	5	87.890	11/10/51	Salton Sea, Calif.....	ALTER EGO, Paul Sawyer
48 cu. in. hydro.....	5	80.433	8/19/53	Seattle, Wash.....	I'M IN, Richard Hallett
91 cu. in. hydroplane.....	5	65.029	9/2/53	Daville Lake, Ore.....	LITTLE RACKET, J. A. Colcock
135 cu. in. hydroplane.....	5	59.960	2/17/51	St. Petersburg.....	RED WITCH, Jack V. Deman
Pacific One-Design hydro.....	5	77.519	11/10/51	Salton Sea, Calif.....	LITTLE JOE, Morlan Visel
Cracker Box inb. runabout.....	5	57.216	10/17/53	Salton Sea, Calif.....	LITTLE BEAVER, Marion Beaver
Jersey Speed Skiff.....	5	65.217	6/27/54	Salton Sea, Calif.....	HOT ICE, Carl Maginn
	5	46.153	9/12/53	Red Bank, N. J.....	SLO POKE, James Camp

(n) — Nautical miles.

## HARMSWORTH TROPHY WINNERS

Year	Boat and Country	Speed*
1903—NAPIER I, France.....		19.53
1904—TREFLE-A-QUATRE, England.....		26.63
1905—NAPIER II, England.....		26.03
1906—YARROW-NAPIER, England.....		15.48
1907—DIXIE I, United States.....		31.78
1908—DIXIE II, United States.....		31.347
1910—DIXIE III, United States.....		36.04
1911—DIXIE IV, United States.....		40.28
1912—MAPLE LEAF IV, England.....		43.18
1913—MAPLE LEAF IV, England.....		57.45
1920—MISS AMERICA I, United States.....		61.51
1921—MISS AMERICA II, United States.....		59.75
1926—MISS AMERICA V, United States.....		61.118
1928—MISS AMERICA VII, United States.....		59.325
1929—MISS AMERICA VIII, United States.....		75.287
1930—MISS AMERICA IX, United States.....		77.233
1931—MISS AMERICA VIII, United States.....		85.861
1932—MISS AMERICA X, United States.....		78.489
1933—MISS AMERICA X, United States.....		86.939
1949—SKIP-A-LONG, United States.....		94.285
1950—SLO-MO-SHUN IV, United States.....		100.680

\* In statute miles per hour.

† First of hydroplanes to win, predecessors being all displacement craft.

## PRESIDENT'S CUP WINNERS

(At Washington, D. C.)

(3 heats of 15 statute miles each)

Year	Winner and owner	m.p.h.
1926—CIGARETTE, L. G. Hamersley.....		55.20
1927—MISS SYNDICATE, Horace E. Dodge.....		51.62
1929—IMP, Richard F. Hoyt.....		47.131
1930—HOTSY-TOTSY, R. Hoyt-V. Klierath.....		54.93
1931—EL LAGARTO, George Reis.....		51.148
1932—DELPHINE IV, Mrs. R. T. Baker.....		57.162
1933—EL LAGARTO, George Reis.....		55.555
1934—EL LAGARTO, George Reis.....		57.216
1935—NOTRE DAME, Herbert Mendelson.....		52.80
1936—MA-JA, Jack Rutherford.....		57.252
1937—NOTRE DAME, Herbert Mendelson.....		64.516
1938—ALAGI, Theo Rossi.....		62.285
1939—MISS CANADA III, E. A. Wilson.....		51.83
1940—NOTRE DAME, Herbert Mendelson.....		65.790
1946—MISS GREAT LAKES, Albin Fallon.....		69.632
1947—MISS PEPS V, Dossin Bros.....		64.114
1948—SUCH CRUST, Jack Schafer.....		73.409
1949—No race.*		
1950—MISS PEPSI, Dossin Bros.....		83.450
1951—MISS PEPSI, Dossin Bros.....		78.611
1952—MISS PEPSI, Dossin Bros.....		84.472
1953—SLO-MO-SHUN V, Stanley S. Sayres.....		91.070

\* *My Sweetie*, piloted by Bill Cantrell, won the first heat in 11 minutes 27 4/10 seconds. The water was too rough for the second and third heats.

## HORSE RACING

**A**NCIENT DRAWINGS on stone and bone prove that horse racing is at least 3000 years old, but Thoroughbred Racing is a modern development. Practically every thoroughbred in training today traces its registered ancestry back to one or more of three sires that arrived in England about 1728 from the Near East and became known, from the names of their owners, as the Byerly Turk, the Darley Arabian and the Godolphin Arabian. The Jockey Club (English) was founded at Newmarket in 1750 or 1751 and became the custodian of the Stud Book as well as the court of last resort in deciding turf affairs.

There was horse racing in this country before the Revolution, but the great lift to the breeding industry came with the importation in 1798, by Col. John Hoomes of Virginia, of Diomed, winner of the Epson Derby of 1780. Diomed's lineal descendants included such famous stars of the American turf as American Eclipse and Lexington. From 1800 to the time of the Civil War there were race courses and breeding establishments plentifully scattered through Virginia, North Carolina, South Carolina, Tennessee, Kentucky and

Louisiana. In fact, thoroughbred racing was largely a Southern sport and that was one reason why the Confederacy had such excellent cavalry in the Civil War. A century ago crack horses were matched in four-mile races that were run in heats, best two out of three!

The oldest stake event in North America is the Queen's Plate, a Canadian fixture that was first run in the Province of Quebec in 1836. The oldest stake event in the United States is The Travers, which was first run at Saratoga in 1864. The gambling that goes with horse racing and trickery by jockeys, trainers, owners and track officials caused attacks on the sport by reformers and a demand among horse racing enthusiasts for an honest and effective control of some kind, but nothing of lasting value to racing came of this until the formation of The Jockey Club in 1894. The Jockey Club, composed of about fifty members chosen from the aristocracy of the turf, was all-powerful in racing regulation until the State Racing Commissions came into being as a result of mutual betting and the great revenues that came with the tax on the "daily handle."

## Horse Racing Statistics

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## HISTORY OF TRADITIONAL STAKES

## AMERICAN DERBY

Washington Park; 3-year-olds; 1½ miles.

Run at old Washington Park, Chicago, through 1904; run at Hawthorne in 1916; run at Arlington Park in 1928. Distance 1½ miles until 1928; 1¼ miles until 1952.

Year	Winner	Jockey	Wt.	Win val.	Year	Winner	Jockey	Wt.	Win val.
1884	Modesty.....	I. Murphy.....	117	\$10,700	1930	Reveille Boy.....	W. Fronk.....	118	\$51,200
1885	Volante.....	I. Murphy.....	123	9,570	1931	Mate.....	G. Ellis.....	126	48,670
1886	Silver Cloud.....	I. Murphy.....	121	8,160	1932	Gusto.....	S. Coucci.....	118	48,205
1887	C. H. Todd.....	Hamilton.....	118	13,690	1933	Mr. Khayyam.....	P. Walls.....	121	23,410
1888	Emperor of Norfolk	I. Murphy.....	123	14,340	1934	Cavalcade.....	M. Garner.....	126	23,315
1889	Spokane.....	T. Kiley.....	121	15,400	1935	Black Helen.....	D. Meade.....	118	25,020
1890	Uncle Bob.....	T. Kiley.....	115½	15,260	1937	Dawn Play.....	L. Balaski.....	116	25,400
1891	Strathmeath.....	Covington.....	112	18,610	1940	Mioland.....	J. Adams.....	123	44,900
1892	Carlsbad.....	R. Williams.....	122	16,930	1941	Whirlaway.....	A. Robertson.....	126	44,970
1893	Boundless.....	E. Garrison.....	122	49,500	1942	Alsab.....	G. Woolf.....	126	60,855
1894	Rey el S'ta A'ta.....	E. Van Kuren.....	122	19,750	1943	Askmenow.....	G. Woolf.....	115	56,150
1898	Pink Coat.....	W. Martin.....	127	9,225	1944	By Jimmy.....	G. Woolf.....	122	61,650
1900	Sidney Lucas.....	J. Bullman.....	122	9,425	1945	Fighting Step.....	G. South.....	118	68,950
1901	Robert Waddell.....	J. Bullman.....	119	19,275	1946	Eternal Reward.....	R. Campbell.....	118	83,455
1902	Wyeth.....	L. Lyne.....	122	19,875	1947	Fervent.....	D. Dodson.....	118	70,950
1903	The Picket.....	Helgesen.....	115	27,025	1948	Citation.....	E. Arcaro.....	126	66,450
1904	Highball.....	G. C. Fuller.....	122	26,325	1949	Ponder.....	S. Brooks.....	126	66,150
1916	Dodge.....	F. Murphy.....	126	6,850	1950	Hill Prince.....	E. Arcaro.....	126	60,050
1926	Boot to Boot.....	A. Johnson.....	121	89,000	1951	Hall of Fame.....	T. Atkinson.....	122	61,200
1927	Hydromel.....	L. McDermott.....	116	22,750	1952	Mark-Ye-Well.....	E. Arcaro.....	120	103,325
1928	Toro.....	E. Ambrose.....	126	21,920	1953	Native Dancer.....	E. Arcaro.....	128	66,500
1929	Windy City.....	L. McDermott.....	118	47,550	1954	Errard King.....	S. Boulmetis.....	124	68,900

## ARLINGTON CLASSIC

Arlington Park; 3-year-olds; 1 mile.

Distance 1½ miles from 1929 to 1951, inclusive. Run at Washington Park in 1943, 1944 and 1948.

Year	Winner	Jockey	Wt.	Win val.	1942	Shut Out	E. Arcaro	126	\$69,700
1929	Blue Larkspur	M. Garner	126	\$59,900	1943	Slide Rule	F. Zufelt	120	53,450
1930	Gallant Fox	E. Sande	126	64,750	1944	Twilight Tear	L. Haas	114	62,050
1931	Mate	A. Robertson	126	73,650	1945	Pot o' Luck	D. Dodson	119	67,150
1932	Gusto	S. Coucci	126	76,600	1946	The Dude	M. Duhon	119	76,850
1933	Inlander	R. Jones	118	32,755	1947	But Why Not	W. Mehrtens	117	71,500
1934	Cavalcade	M. Garner	126	30,325	1948	Papa Redbird	R. L. Baird	122	66,600
1935	Omaha	W. D. Wright	126	28,975	1949	Pander	S. Brooks	126	65,450
1936	Granville	J. Stout	126	28,400	1950	Greek Song	O. Scurlock	120	58,950
1937	Flying Scot	J. Gilbert	123	27,375	1951	Hall of Fame	T. Atkinson	120	62,975
1938	Neddayr	W. D. Wright	121	27,500	1952	Mark-Ye-Well	E. Arcaro	112	105,375
1939	Challedon	H. Richards	126	35,600	1953	Native Dancer	E. Guerin	126	97,725
1940	Sirocco	G. Woolf	121	37,935	1954	Errared King	S. Boulmetis	120	104,475
1941	Attention	C. Bierman	121	42,450					

## ARLINGTON FUTURITY

Arlington Park; 2-year-olds; ¾ mile.

American National Futurity in 1927 and 1928. Run at Washington Park from 1943 to 1945, inclusive.

1927	Misstep	E. Pool	122	\$ 9,360	1943	Jezrahel	O. Grohs	116	\$48,650
1928	Double Heart	L. Geving	115	21,920	1944	Free for All	O. Grohs	122	48,525
1932	Ladysman	R. Jones	117	38,010	1945	Spy Song	S. Brooks	122	58,650
1933	Far Star	D. Bellizzi	116	31,020	1946	Cosmic Bomb	S. Clark	122	66,875
1934	Toro Nancy	R. Jones	112	41,725	1947	Piat	Dell Jessop	122	66,900
1935	Grand Slam	J. Bryson	122	45,135	1948	Mr. Busher	F. Zufelt	122	62,725
1936	Case Ace	A. Robertson	117	36,540	1949	Wisconsin Boy	J. Chestnut	122	60,075
1937*	Tiger	A. Robertson	122		1950	To Market	A. Rivera	122	56,215
	Teddy's Comet	G. Smith	117	18,000	1951	Hill Gail	S. Brooks	122	64,140
1938	Thingumabob	E. Arcaro	117	31,110	1952	Mr. Good	D. Dodson	122	81,575
1939	Andy K	J. E. Oros	114	33,735	1953	Hasty Road	E. Arcaro	122	101,475
1940	Swain	J. Adams	117	34,470	1954	Royal Note	E. Arcaro	122	93,345
1941	Sun Again	W. Eads	122	34,655					
1942	Occupation	L. Balaski	117	51,500					

\* Dead heat.

## BELMONT FUTURITY

Belmont Park; 2-year-olds; 6½ furlongs

Distance 1,263 yards 1 foot from 1892 to 1901, inclusive. Distance 3/4 mile prior to 1892 and from 1902 to 1924, inclusive; about 7/8 mile from 1925 to 1933, inclusive. Run at Sheepshead Bay until 1910. Run at Saratoga by special arrangement in 1910, 1913 and 1914.

Year	Winner	Jockey	Wt.	Win val.	1922	Sally's Alley	A. Johnson	116	\$47,550
1888	Proctor Knott	S. Barnes	112	\$40,900	1923	St. James	T. McTaggart	130	64,810
1889	Chaos	G. Day	109	54,500	1924	Mother Goose	L. McAttee	114	65,730
1890	Potomac	A. Hamilton	115	67,675	1925	Pompey	L. Fator	127	58,480
1891	His Highness	J. McLaughlin	130	61,675	1926	Scapa Flow	L. Fator	122	65,980
1892	Morello	W. Hayward	118	40,450	1927	Anita Peabody	C. Lang	124	91,790
1893	Domino	F. Taral	130	48,855	1928	High Strung	L. McAttee	122	97,990
1894	The Butterflies	H. Griffin	112	48,710	1929	Whichone	R. Workman	125	105,730
1895	Requital	H. Griffin	115	53,190	1930	Jamestown	L. McAttee	130	99,600
1896	Ogden	F. Turbiville	115	43,790	1931	Top Flight	R. Workman	127	94,780
1897	L'Alouette	R. Clawson	115	34,290	1932	Kerry Patch	P. Walls	122	88,690
1898	Martimas	H. Lewis	118	36,610	1933	Singing Wood	R. Jones	122	81,700
1899	Chacornac	H. Spencer	114	30,630	1934	Chance Sun	W. D. Wright	122	77,510
1900	Ballyhoo Bay	T. Sloan	112	33,580	1935	Tintagel	S. Coucci	122	66,450
1901	Yankee	W. O'Connor	119	36,850	1936	Pompoon	H. Richards	127	55,630
1902	Savable	L. Lyne	119	44,500	1937	Menow	C. Kurtsinger	119	56,800
1903	Hamburg Belle	G. Fuller	114	36,600	1938	Porter's Mite	B. James	119	57,045
1904	Artful	E. Hildebrand	114	40,830	1939	Bimelech	F. A. Smith	126	57,710
1905	Ormondale	A. Redfern	117	32,960	1940	Our Boots	E. Arcaro	119	65,800
1906	Electioneer	W. Shaw	117	36,880	1941	Some Chance	W. Eads	122	57,900
1907	Colin	W. Miller	125	26,640	1942	Occupation	G. Woolf	126	57,890
1908	Maskette	J. Notter	118	26,110	1943	Occupy	G. Woolf	126	55,635
1909	Sweep	J. Butwell	126	24,100	1944	Pavot	G. Woolf	126	53,890
1910	Novelty	C. H. Shilling	127	25,360	1945	Star Pilot	A. Kirkland	126	52,940
1913	Pennant	C. Borel	119	15,060	1946	First Flight	E. Arcaro	123	73,350
1914	Trojan	C. Burlingame	117	16,010	1947	Citation	A. Snider	122	78,430
1915	Thunderer	J. Notter	122	16,590	1948	Blue Peter	E. Guerin	126	88,410
1916	Campfire	J. McTaggart	125	17,340	1949	Guillotine	T. Atkinson	122	87,585
1917	Papp	L. Allen	127	15,600	1950	Battlefield	E. Arcaro	122	81,715
1918	Dunboyne	A. Schuttlinger	127	23,360	1951	Tom Fool	T. Atkinson	122	86,710
1919	Man o' War	J. Loftus	127	26,650	1952	Native Dancer	E. Guerin	122	82,845
1920	Slep Lightly	F. Keogh	116	35,870	1953	Porterhouse	W. Boland	122	92,875
1921	Bunting	F. Coltiletti	117	39,700					



## BELMONT STAKES

Belmont Park; 3-year-olds; 1½ miles.

Run at Jerome Park prior to 1890; run at Morris Park from 1890 to 1905. Distance 1½ miles prior to 1874; reduced to 1¼ miles, 1874; reduced to 1¼ miles, 1890; changed to 1½ miles, 1893; increased to 1¼ miles, 1895; increased to 1½ miles, 1896; changed to 1¼ miles in 1904 and 1905; increased to 1½ miles, 1926.

Year	Winner	Jockey	Wt.	Win val.	1910	Sweep	J. Butwell	126	\$9,700
1867	Ruthless	J. Gilpatrick	107	\$ 1,850	1913	Prince Eugene	R. Troxler	109	2,825
1868	General Duke	R. Swim	110	2,800	1914	Luke McLuke	M. Buxton	126	3,025
1869	Fenian	C. Miller	110	3,350	1915	The Finn	G. Byrne	126	1,825
1870	Kingfisher	W. Dick	110	3,750	1916	Friar Rock	E. Haynes	126	4,100
1871	Harry Bassett	W. Miller	110	5,450	1917	Hourless	J. Butwell	126	5,800
1872	Joe Daniels	J. Rowe	110	4,500	1918	Johren	F. Robinson	126	8,950
1873	Springbok	J. Rowe	110	5,200	1919	Sir Barton	J. Loftus	126	11,950
1874	Saxon	G. Bardee	110	4,200	1920	Man o' War	C. Kummer	126	7,950
1875	Calvin	R. Swim	110	4,450	1921	Grey Lag	E. Sande	126	8,650
1876	Algerine	W. Donohue	110	3,700	1922	Pilory	C. H. Miller	126	39,200
1877	Cloverbrook	C. Holloway	110	5,200	1923	Zev	E. Sande	126	38,000
1878	Duke of Magenta	L. Hughes	118	3,850	1924	Mad Play	E. Sande	126	42,880
1879	Spendthrift	S. Evans	118	4,250	1925	American Flag	A. Johnson	126	38,500
1880	Grenada	L. Hughes	118	2,800	1926	Crusader	A. Johnson	126	48,550
1881	Saunterer	T. Costello	118	3,000	1927	Chance Shot	E. Sande	126	60,910
1882	Forester	J. McLaughlin	118	2,600	1928	Vito	C. Kummer	126	63,430
1883	George Kinney	J. McLaughlin	118	3,070	1929	Blue Larkspur	M. Garner	126	59,650
1884	Panique	J. McLaughlin	118	3,150	1930	Gallant Fox	E. Sande	126	66,040
1885	Tyrant	P. Duffy	118	2,710	1931	Twenty Grand	C. Kurtzinger	126	58,770
1886	Inspector B.	J. McLaughlin	118	2,720	1932	Faireno	T. Malley	126	55,120
1887	Hanover	J. McLaughlin	118	2,900	1933	Hurryhoff	M. Garner	126	49,490
1888	Sir Dixon	J. McLaughlin	118	3,440	1934	Peace Chance	W. D. Wright	126	43,410
1889	Eric	W. Hayward	118	4,960	1935	Omaha	W. Saunders	126	35,480
1890	Burlington	S. Barnes	118	8,560	1936	Granville	J. Stout	126	29,800
1891	Foxford	E. Garrison	118½	5,070	1937	War Admiral	C. Kurtzinger	126	38,020
1892	Patron	W. Hayward	122	6,610	1938	Pasteurized	J. Stout	126	34,530
1893	Comanche	W. Simms	117	5,310	1939	Johnstown	J. Stout	126	37,020
1894	Henry of Navarre	W. Simms	117	6,680	1940	Bimelech	F. A. Smith	126	35,030
1895	Belmar	F. Taral	119	2,700	1941	Whirlaway	E. Arcaro	126	39,770
1896	Hastings	H. Griffin	122	3,025	1942	Shut Out	E. Arcaro	126	44,520
1897	Scottish Chieftain	J. Scherrer	115	3,550	1943	Count Fleet	J. Longden	126	35,340
1898	Bowling Brook	F. Littlefield	122	7,810	1944	Bounding Home	G. L. Smith	126	55,000
1899	Jean Bereaud	R. Clawson	122	9,445	1945	Pavot	E. Arcaro	126	52,675
1900	Ildrim	N. Turner	126	14,790	1946	Assault	W. Mehlrens	126	75,400
1901	Commando	H. Spencer	126	11,595	1947	Phalanx	R. Donoso	126	78,900
1902	Masterman	J. Bullman	126	13,220	1948	Citation	E. Arcaro	126	77,700
1903	Africander	J. Bullman	126	12,285	1949	Capot	T. Atkinson	126	60,900
1904	Delhi	G. Odum	126	11,575	1950	Middleground	W. Boland	126	61,350
1905	Tanya	E. Hildebrand	121	17,240	1951	Counterpoint	D. Gorman	126	82,000
1906	Burgomaster	L. Lyne	126	22,700	1952	One Count	E. Arcaro	126	82,400
1907	Peter Pan	G. Mountain	126	22,765	1953	Native Dancer	E. Guerin	126	82,500
1908	Colin	J. Nutter	126	22,765	1954	High Gun	E. Guerin	126	89,000
1909	Joe Madden	E. Dugan	126	24,550					

## EPSOM DERBY

Epsom Downs, England; 3-year-olds; 1 mile, 885 yards.

Distance one mile prior to 1784. Distance 1¼ miles since 1939. Run at Newmarket from 1915 to 1918, inclusive and from 1940 to 1945, inclusive, and called the New Derby Stakes.

Year	Winner	Owner	Win val.	Year	Winner	Owner	Win val.
1780	Diomed	Sir C. Bunbury	\$ 5,620	1798	Sir Harry	Mr. Cookson	\$5,375
1781	Y. Eclipse	Mr. O'Kelly	6,255	1799	Archduke	Sir F. Standish	5,000
1782	Assassin	Lord Egremont	5,500	1800	Champion	Mr. Wilson	5,250
1783	Saltram	Mr. Parker	5,000	1801	Eleanor	Sir C. Bunbury	4,375
1784	Sergeant	Mr. O'Kelly	5,125	1802	Tyrant	Duke of Grafton	4,750
1785	Aimwell	Lord Clermont	4,375	1803	Ditto	Sir H. Williamson	4,625
1786	Noble	Mr. Panton	5,000	1804	Hannibal	Lord Egremont	4,625
1787	Sir P. Teazle	Lord Derby	4,500	1805	Card. Beaufort	Lord Egremont	6,250
1788	Sir Thomas	Prince of Wales	4,625	1806	Paris	Lord Foley	5,875
1789	Skyscraper	Duke of Bedford	4,652	1807	Election	Lord Egremont	5,875
1790	Rhadamanthus	Lord Grosvenor	4,750	1808	Pan	Sir H. Williamson	5,500
1791	Eager	Duke of Bedford	4,625	1809	Pope	Duke of Grafton	6,375
1792	John Bull	Lord Grosvenor	4,875	1810	Whalebone	Duke of Grafton	6,500
1793	Waxy	Sir F. Poole	6,500	1811	Phantom	Sir J. Shelley	7,500
1794	Daedalus	Lord Grosvenor	6,125	1812	Octavius	Mr. Ladbrook	7,125
1795	Spread Eagle	Sir F. Standish	6,500	1813	Smolensko	Sir C. Bunbury	7,375
1796	Didelot	Sir F. Standish	6,500	1814	Blucher	Lord Stawell	7,125
1797	Colt by Fidget	Duke of Bedford	5,000	1815	Whisker	Duke of Grafton	7,500

## Epsom Derby (Cont.)

Year	Winner	Owner	Win Val.				
1816	Prince Leopold.....	Duke of York.....	\$7,250	1886	Ormonde.....	D. of Westminster.....	\$23,500
1817	Azor.....	Mr. Payne.....	8,625	1887	Mer. Hampton.....	Mr. Abington.....	22,625
1818	Sam.....	Mr. Thornhill.....	8,500	1888	Ayrshire.....	Duke of Portland.....	18,375
1819	Tiasias.....	Duke of Portland.....	8,250	1889	Donovan.....	Duke of Portland.....	20,250
1820	Sailor.....	Mr. Thornhill.....	7,875	1890	Sanfoin.....	Sir J. Miller.....	29,700
1821	Gustavus.....	Mr. Hunter.....	7,875	1891	Common.....	Sir F. Johnstone.....	27,550
1822	Moses.....	Duke of York.....	7,625	1892	Sir Hugo.....	Lord Bradford.....	34,900
1823	Emilius.....	Mr. Udny.....	8,375	1893	Isinglass.....	Mr. McCalmont.....	27,575
1824	Cedric.....	Sir J. Shelley.....	8,875	1894	Ladas.....	Lord Rosebery.....	27,250
1825	Middleton.....	Lord Jersey.....	9,000	1895	Sir Visto.....	Lord Rosebery.....	27,250
1826	Lap Dog.....	Lord Egremont.....	9,000	1896	Persimmon.....	Prince of Wales.....	27,250
1827	Mameluke.....	Lord Jersey.....	13,500	1897	Galtee More.....	Mr. Gubbins.....	27,250
1828	Cadland.....	Duke of Rutland.....	13,000	1898	Jeddah.....	J. Larnach.....	27,250
1829	Frederick.....	Mr. Gratwicke.....	12,750	1899	Flying Fox.....	D. of Westminster.....	27,250
1830	Priam.....	Mr. Chirney.....	13,500	1900	Diamond Jubilee.....	Prince of Wales.....	27,250
1831	Spaniel.....	Lord Lowther.....	15,500	1901	Volodyovskij.....	W. C. Whitney.....	28,350
1832	St. Giles.....	Mr. Ridsdale.....	14,375	1902	Ard Patrick.....	J. Gubbins.....	27,250
1833	Dangerous.....	Mr. Saddler.....	17,625	1903	Rock Sand.....	Sir J. Miller.....	32,500
1834	Plenipotentiary.....	Mr. Batson.....	17,125	1904	St. Amant.....	L. de Rothschild.....	32,250
1835	Mundig.....	Mr. Bowes.....	16,750	1905	Cicero.....	Lord Rosebery.....	32,250
1836	Bay Middleton.....	Lord Jersey.....	18,125	1906	Spearmint.....	Maj. E. Loder.....	32,250
1837	Phosphorus.....	Lord Berner.....	14,000	1907	Orbyt.....	R. Croker.....	32,250
1838	Amato.....	Sir G. Heatcote.....	18,265	1908	Signorinetta.....	Chev. Ginistrelli.....	32,250
1839	Bloomsbury.....	Mr. W. Ridsdale.....	19,500	1909	Minoru.....	King Edward.....	32,250
1840	Little Wonder.....	Mr. Robertson.....	19,125	1910	Lemberg.....	Mr. Fairie.....	32,250
1841	Coronation.....	Mr. Rawlinson.....	21,875	1911	Sunstar.....	J. B. Joel.....	32,250
1842	Attila.....	Colonel Anson.....	24,500	1912	Tagalie.....	W. Raphael.....	32,250
1843	Cotherstone.....	Mr. Bowes.....	21,250	1913	Aboyeur.....	A. P. Cunliffe.....	32,250
1844	Orlando.....	Colonel Peel.....	21,750	1914	Durbar II.....	H. B. Duryea.....	32,250
1845	Merry Monarch.....	Mr. Gratwick.....	20,000	1915	Pommern.....	S. Joel.....	12,000
1846	Pyrrhus the First.....	Mr. Gully.....	26,500	1916	Fifinella.....	E. Hulton.....	14,500
1847	Cossack.....	Mr. Pedley.....	26,500	1917	Gay Crusader.....	Mr. Fairie.....	10,250
1848	Surplice.....	Lord Clifton.....	28,000	1918	Gainsborough.....	Lady Jas. Douglas.....	20,000
1849	T. Flying Dutchman.....	Lord Eglinton.....	31,875	1919	Grand Parade.....	Lord Glanely.....	32,250
1850	Voltigeur.....	Lord Zetland.....	29,375	1920	Spain Kop.....	Maj. G. Loder.....	32,250
1851	Teddington.....	Sir J. Hawley.....	26,875	1921	Humorist.....	J. B. Joel.....	32,250
1852	Dan. O'Rourke.....	Mr. Bowes.....	24,350	1922	Captain Cuttle.....	Lord Woolavington.....	51,250
1853	W. Australian.....	Mr. Bowes.....	26,500	1923	Papyrus.....	Ben Irish.....	56,800
1854	Andover.....	Mr. Gully.....	29,250	1924	Sansovino.....	Lord Derby.....	59,025
1855	Wild Dayrell.....	F. Popham.....	24,125	1925	Manna.....	H. E. Morris.....	55,475
1856	Ellinton.....	Admiral Harcourt.....	28,125	1926	Coronach.....	Lord Woolavington.....	51,750
1857	Blink Bonny.....	W. L'Anson.....	27,750	1927	Call Boy.....	Frank Curzon.....	63,075
1858	Beadsman.....	Sir J. Hawley.....	26,615	1928	Felstead.....	Sir H. C. Liffé-Owen.....	58,025
1859	Musjid.....	Sir J. Hawley.....	33,250	1929	Trigo.....	W. Barnett.....	59,825
1860	Thormanby.....	Mr. Merry.....	30,500	1930	Blenheim.....	H. H. Aga Khan.....	50,180
1861	Kettledrum.....	Colonel Towneley.....	30,500	1931	Cameronian.....	J. A. Dewar.....	48,640
1862	Caractacus.....	Mr. Snewing.....	32,125	1932	April the Fifth.....	T. Walls.....	34,056
1863	Macaroni.....	R. C. Naylor.....	34,500	1933	Hyperion.....	Lord Derby.....	49,182
1864	Blair Athol.....	W. L'Anson.....	32,500	1934	Windsor Lad.....	H. H. M. of Raj'pla.....	46,760
1865	Gladiator.....	C't F. deLagrange.....	34,375	1935	Bahram.....	H. H. Aga Khan.....	46,080
1866	Lord Lyon.....	R. Sutton.....	37,750	1936	Mahmoud.....	H. H. Aga Kahn.....	49,670
1867	Hermit.....	Mr. Chaplin.....	35,000	1937	Mid-Day Sun.....	Mrs. G. B. Miller.....	47,205
1868	Blue Gown.....	Sir J. Hawley.....	34,000	1938	Bois Roussel.....	P. Beatty.....	43,644
1869	Pretender.....	J. Johnstone.....	31,125	1939	Blue Peter.....	Lord Rosebery.....	42,680
1870	Kingcraft.....	Lord Falmouth.....	39,875	1940	Pont l'Eveque.....	F. Darling.....	23,803
1871	Favonius.....	B. Rothschild.....	25,625	1941	Owen Tudor.....	Mrs. M'd'ald-Buc'n.....	18,003
1872	Cremerne.....	H. Savile.....	24,250	1942	Watling Street.....	Lord Derby.....	15,530
1873	Doncaster.....	Mr. Merry.....	24,125	1943	Straight Lead.....	Miss Dorothy Paget.....	17,552
1874	Geo. Frederick.....	W. S. Cartwright.....	26,750	1944	Ocean Swell.....	Lord Rosebery.....	23,604
1875	Calopin.....	Prince Bathany.....	24,750	1945	Dante.....	Sir Eric Olsson.....	33,356
1876	Kisber.....	A. Baltazzi.....	27,875	1946	Airborne.....	J. E. Ferguson.....	38,662
1877	Silbio.....	Lord Falmouth.....	30,250	1947	Pearl Diver.....	B. G. de Waldner.....	38,788
1878	Sefton.....	W. S. Crawford.....	29,125	1948	My Love.....	H. H. Aga Khan.....	49,936
1879	Sir Bevvs.....	Mr. Acton.....	35,125			Leon Volterra.....	
1880	Bend Or.....	D. of Westminster.....	31,875	1949	Nimbus.....	Mrs. M. Glenister.....	56,980
1881	Iroquoist.....	P. Lorillard.....	29,625	1950	Galcador.....	Marcel Boussac.....	51,030
1882	Shotover.....	D. of Westminster.....	23,875	1951	Arctic Prince.....	Joseph McGrath.....	54,264
1883	St. Blaise.....	Sir F. Johnstone.....	25,750	1952	Tulyar.....	H. H. Aga Khan.....	57,353
1884*	St. Gatien.....	J. Hammond.....		1953	Pinza.....	Sir Victor Sassoon.....	53,530
	Harvester.....	Sir J. Willoughby.....	24,500	1954	Never Say Die.....	Robert S. Clark.....	47,768
1885	Melton.....	Lord Hastings.....	22,625				

\* Dead heat; stake divided. † American bred or owned.

## GRAND NATIONAL STEEPLECHASE

Liverpool, England; 6-year-olds and over; 4 miles, 856 yards (Aintree Course)

Year	Winner	Owner	Starters	Value	Year	Winner	Owner	Starters	Value
1839	Lottery	J. Elmore	17		1896	The Soarer	Lord Wavertree	28	\$ 9,875
1840	Jerry	Mr. Villebois	12		1897	Manifesto	H. M. Dyas	28	9,875
1841	Charity	Lord Craven	11		1898	Drogheda	C. G. Adams	25	9,875
1842	Gaylad	J. Elmore	15		1899	Manifesto	J. G. Bulteel	19	9,875
1843	Vanguard	Lord Chesterfield	16		1900	Ambush II	Prince of Wales	16	9,875
1844	Pioneer	Mr. Quartermaine	22		1901	Gruddon	B. Bletsoe	24	9,875
1845	Cure All	W. S. Crawford	15		1902	Shannon Lass	A. Gorham	21	10,000
1846	Pioneer	Mr. Adams	22		1903	Drumcree	J. S. Morrison	23	10,000
1847	Matthew	Mr. Courtenay	26		1904	Moifaa	G. H. Gollan	26	10,000
1848	Chandler	Capt. Little	30		1905	Kirkland	F. Bibby	27	10,125
1849	Peter Simple	Mr. S. Mason, Jr.	24	\$4,025	1906	Asceit's Silver	Prince Hatzfeldt	23	10,875
1850	Abd el Kader	Mr. Osborne	32		1907	Eremon	S. Howard	23	12,000
1851	Abd el Kader	Mr. Osborne	21		1908	Rubio†	Maj. F. Douglas-Pennant	24	12,000
1852	Miss Mowbray	T. F. Mason	24	3,400	1909	Luttrell III	J. Hennessy	32	12,000
1853	Peter Simple	Capt. Little	21		1910	Kingstown	S. Howard	25	12,000
1854	Bourton	Mr. Moseley			1911	Glenside	F. Bibby	26	12,500
1855	Wanderer	Mr. Dennis	20		1912	Jerry M.	Mr. C. G. Assheton-Smith	24	16,000
1856	Freetrader	W. Barnett	21		1913	Covertcoat	Sir C. G. Assheton-Smith	22	15,850
1857	Emigrant	G. Hodgman	28	5,575	1914	Sunloch	T. Tyler	20	17,575
1858	Little Charley	C. Capel	16		1915	Ally Sloper	Lady Nelson	20	17,575
1859	Half Caste	Mr. Willoughby	20	4,200	1916*	Bermouth	P. F. Heybourn	21	5,750
1860	Anatis	C. Capel	19		1917*	Ballymacad	Sir G. Bullough	19	6,025
1861	Jealousy	J. Bennett	24	4,925	1918*	Poethlyn	Mrs. H. Peel	17	4,925
1862	Huntsman	Visc't de Namur	13		1919*	Poethlyn	Mrs. H. Peel	22	17,950
1863	Emblem	Lord Coventry	16	4,275	1920	Troytown	Major Gerrard	24	21,800
1864	Emblematic	Lord Coventry	25		1921	Shaun Spadah	T. McAlpine	35	39,925
1865	Alcibiade	B. J. Angell	23	5,175	1922	Music Hall	Hugh Kershaw	32	35,000
1866	Salamander	Mr. Studd	30		1923	Sgt. Murphy†	Stephen Sanford	28	36,100
1867	Cortolvin	Duke of Hamilton	23	8,300	1924	Master Rob't.	Lord Airlie	30	40,825
1868	The Lamb	Lord Poulett	21	7,850	1925	Double Chance	Major D. Gould	33	40,600
1869	The Colonel	Mr. Weyman	22	8,800	1926	Jack Horner	C. Schwartz	30	31,550
1870	The Colonel	M. Evans	23	7,325	1927	Sprig	Mrs. M. Partridge	37	41,075
1871	The Lamb	Lord Poulett	25	8,325	1928	Tipperary Tim	H. S. Kenyon	42	55,900
1872	Casse Tete	E. Brayley	25	7,275	1929	Gregalach	Mrs. M. A. G'm'll	66	64,625
1873	Disturbance	Capt. Machell	28	9,800	1930	Shaun Gollin	W. Midwood	41	48,650
1874	Reugny	Capt. Machell	22	9,450	1931	Grakle	C. R. Taylor	36	37,240
1875	Pathfinder	H. Bird	18	9,700	1932	Forbis	W. Parsonage	36	28,577
1876	Regal	Capt. Machell	19	7,550	1933	Kellsboro Jack†	Mrs. F. A. Clark	34	36,725
1877	Austerlitz	F. G. Hobson	16	6,450	1934	Golden Miller	Miss D. Paget	30	36,325
1878	Shifnal	J. Nightingall	12	8,450	1935	Reynoldstown	Maj. Noel F'rlong	27	32,725
1879	The Liberator	G. Moore	18	9,500	1936	Reynoldstown	Maj. Noel F'rlong	35	35,100
1880	Empress	P. Ducrot	14	6,250	1937	Royal Mail	H. Lloyd Thomas	33	33,225
1881	Woodbrook	Capt. Kirkwood	13	4,900	1938	Battleship†	Mrs. M. Scott	36	37,545
1882	Seaman	Lord Manners	12	6,675	1939	Workman	Sir A. Maguire	37	31,966
1883	Zoedone	Prince C. Kinsky	10	4,625	1940	Bogskar	Lord Stalbridge	30	16,887
1884	Voluptuary	H. F. Boyd	15	5,175	1946	Lovely Cottage	Jock Morant	34	35,300
1885	Roquefort	A. Cooper	19	5,175	1947	Caughoo	J. J. McDowell	57	39,728
1886	Old Joe	Mr. Douglas	23	6,805	1948	Sheila's Cottage	John Proctor	43	36,428
1887	Gamecock	E. Jay	16	6,080	1949	Russian Hero	W. F. Williamson	43	37,868
1888	Playfair	Col. E. W. Baird	20	5,905	1950	Freebooter	Mrs. L. Brotherton	49	27,942
1889	Frigate	M. A. Maher	20	6,170	1951	Nickel Coin	Jeffrey Royle	36	24,766
1890	Ilex	G. Masterman	16	8,325	1952	Teal	Harry Lane	47	25,110
1891	Come Away	W. G. Jameson	21	8,400	1953	Early Mist	J. H. Griffin	31	26,406
1892	Father O'Flynn	C. G. Wilson	25	8,400	1954	Royal Tan	J. W. Griffin	29	29,386
1893	Cloister	C. G. Duff	15	9,825					
1894	Why Not	Capt. C. H. Fenwick	14	9,875					
1895	W. M. f. Borneo	J. Widge	19	9,875					

\* Substitute race. † American bred or owned.

**"TRIPLE CROWN" WINNERS IN THE UNITED STATES**  
**(Kentucky Derby, Preakness and Belmont Stakes)**

Year	Horse	Owner	Year	Horse	Owner
1919	Sir Barton	J. K. L. Ross	1941	Whirlaway	Warren Wright
1930	Gallant Fox	William Woodward	1943	Count Fleet	Mrs. John Hertz
1935	Omaha	William Woodward	1946	Assault	Robert J. Kleberg
1937	War Admiral	Samuel D. Riddle	1948	Citation	Warren Wright



## HOLLYWOOD GOLD CUP

Hollywood Park; 3-year-olds and over; 1½ miles.

Run at Santa Anita Park in 1949.

Year	Winner, age	Jockey	Wt.	Win val.	1947	Cover Up (4)	R. Permane	117	\$ 73,500
1938	Seabiscuit (5)	G. Woolf	133	\$37,150	1948	Shannon II (7)	J. Adams	116	67,600
1939	Kayak II (4)	G. Woolf	125	35,075	1949	Solidarity (4)	R. Neves	115	100,000
1940	Challdened (4)	G. Woolf	133	36,200	1950	Noor (5)	J. Longden	130	100,000
1941	Big Pebble (5)	J. Westrope	119	62,475	1951	Citation (6)	S. Brooks	120	100,000
1944	Happy Issue (4)	H. Woodhouse	119	60,600	1952	Two Lea (6)	H. Moreno	113	100,000
1945	Challenge Me (4)	A. Skoronski	108	48,230	1953	Royal Serenade (5)	J. Longden	113	100,000
1946	TriPLICATE (5)	B. James	113	79,900	1954	Correspondent (4)	J. Longden	110	100,000

## KENTUCKY DERBY

Churchill Downs; 3-year-olds; 1½ miles

Distance 1½ miles prior to 1896.

Year	Winner	Jockey	Wt.	Win val.	1915	Regret	J. Notter	112	\$11,450
1875	Aristides	O. Lewis	100	\$2,850	1916	George Smith	J. Loftus	117	9,750
1876	Vagrant	R. Swim	97	2,950	1917	Omar Khayyam	C. Borel	117	16,600
1877	Baden Baden	W. Walker	100	3,300	1918	Exterminator	W. Knapp	114	14,700
1878	Day Star	J. Carter	100	4,050	1919	Sir Barton	J. Loftus	112½	20,825
1879	Lord Murphy	C. Schauer	100	3,550	1920	Paul Jones	T. Rice	126	30,375
1880	Fonso	G. Lewis	105	3,800	1921	Behave Yourself	C. Thompson	126	38,450
1881	Hindoo	J. McLaughlin	105	4,410	1922	Morvich	A. Johnson	126	46,775
1882	Apollo	B. Hurd	102	4,560	1923	Zev	E. Sande	126	53,600
1883	Leonatus	W. Donohue	105	3,760	1924	Black Gold	J. D. Mooney	126	52,775
1884	Buchanan	I. Murphy	110	3,990	1925	Flying Ebony	E. Sande	126	52,950
1885	Joe Cotton	E. Henderson	110	4,630	1926	Bubbling Over	A. Johnson	126	50,075
1886	Ben Ali	P. Duffy	118	4,890	1927	Whiskery	L. McAtee	126	51,000
1887	Montrose	I. Lewis	118	4,200	1928	Reigh Count	C. Lang	126	55,375
1888	Macbeth II	G. Covington	115	4,740	1929	Clyde Van Dusen	L. McAtee	126	53,950
1889	Spokane	T. Kiley	118	4,970	1930	Gallant Fox	E. Sande	126	50,725
1890	Riley	I. Murphy	118	5,460	1931	Twenty Grand	C. Kutsinger	126	48,725
1891	Kingman	I. Murphy	122	4,680	1932	Burgoo King	E. James	126	52,350
1892	Azra	A. Clayton	122	4,230	1933	Brokers Tip	D. Meade	126	48,925
1893	Lookout	E. Kunze	122	4,090	1934	Cavalcade	M. Garner	126	28,175
1894	Chant	F. Goodale	122	4,020	1935	Omaha	W. Saunders	126	39,525
1895	Halma	J. Perkins	122	2,970	1936	Bold Venture	I. Hanford	126	37,725
1896	Ben Brush	W. Simms	117	4,850	1937	War Admiral	C. Kutsinger	126	52,050
1897	Typhoon II	F. Garner	117	4,850	1938	Lawrin	E. Arcaro	126	47,050
1898	Plaudit	W. Simms	117	4,850	1939	Johnstown	J. Stout	126	46,350
1899	Manuel	F. Taral	117	4,850	1940	Gallahadion	C. Bierman	126	60,150
1900	Lieut. Gibson	J. Boland	117	4,850	1941	Whirlaway	E. Arcaro	126	61,275
1901	His Eminence	J. Winkfield	117	4,850	1942	Shut Out	W. D. Wright	126	64,225
1902	Alan-a-Dale	J. Winkfield	117	4,850	1943	Count Fleet	J. Longden	126	60,725
1903	Judge Himes	H. Booker	117	4,850	1944	Pensive	C. McCreary	126	64,675
1904	Elwood	F. Prior	117	4,850	1945	Hoop Jr.	E. Arcaro	126	64,850
1905	Agile	J. Martin	122	4,850	1946	Assault	W. Mehrtens	126	96,400
1906	Sir Huon	R. Troxler	117	4,850	1947	Jet Pilot	E. Guerin	126	92,160
1907	Pink Star	A. Minder	117	4,850	1948	Citation	E. Arcaro	126	83,400
1908	Stone Street	A. Pickens	117	4,850	1949	Ponder	S. Brooks	126	91,600
1909	Wintergreen	V. Powers	117	4,850	1950	Middleground	W. Boland	126	92,650
1910	Donau	F. Herbert	117	4,850	1951	Count Turf	C. McCreary	126	98,050
1911	Meridian	G. Archibald	117	4,850	1952	Hill Gail	E. Arcaro	126	96,300
1912	Worth	C. H. Shilling	117	4,850	1953	Dark Star	H. Moreno	126	90,050
1913	Donerail	R. Goose	117	5,475	1954	Determine	R. York	126	102,050
1914	Old Rosebud	J. McCabe	114	9,125					

## MASSACHUSETTS HANDICAP

Suffolk Downs; 3-year-olds and over; 1½ miles.

Distance 1½ miles prior to 1948.

Year	Winner, age	Jockey	Wt.	Win val.	1945	First Fiddle (6).....	J. Longden.....	121	\$42,750
1935	Top Row (4).....	G. Woolf.....	116	\$18,750	1946	Pavot (4).....	A. Kirkland.....	120	47,750
1936	Time Supply (5).....	R. Workman.....	121	23,500	1947	Stymie (6).....	C. McCreary.....	128	41,150
1937	Seabiscuit (4).....	J. Pollard.....	130	51,780	1948	Beauchef (5).....	R. Donoso.....	115	47,250
1938	Menow (3).....	N. Wall.....	107	40,550	1949	First Nighter (4).....	J. Renick.....	104	39,200
1939	Fighting Fox (4).....	J. Stout.....	113	49,250	1950	Cochise (4).....	E. Arcaro.....	120	21,400
1940	Eight Thirty (4).....	H. Richards.....	126	46,550	1951	One Hitter (5).....	T. Atkinson.....	113	22,000
1941	War Relic (3).....	T. Atkinson.....	102	48,350	1952	To Market (4).....	W. Boland.....	109	32,600
1942	Whirlaway (4).....	G. Woolf.....	130	43,850	1953	Royal Vale (5).....	J. Westrope.....	125	43,300
1943	Market Wise (5).....	V. Nodarse.....	126	39,650	1954	Wise Margin (4).....	K. Stuart.....	111	43,100
1944	First Fiddle (5).....	J. Longden.....	124	41,850					

## PREAKNESS STAKES

Pimlico; 3-year-olds; 1½ miles

Distance 1½ miles prior to 1889; 1¼ miles in 1889; 1½ miles 1894 to 1900, inclusive, and 1908; 1 mile and 70 yards from 1901 to 1907, inclusive; 1 mile in 1909 and 1910; 1½ miles from 1911 to 1924, inclusive. Run at Brooklyn Jockey Club's Gravesend Course from 1894 to 1908, inclusive. Run in two divisions in 1918.

Year	Winner	Jockey	Wt.	Win val.	1916	Damrosch	L. McAtee	115	\$ 1,380
1873	Survivor	G. Barbee	110	.....	1917	Kalitan	E. Haynes	116	4,800
1874	Culpepper	M. Donohue	110	.....	1918	War Cloud	J. Loftus	117	12,250
1875	Tom Ochiltree	L. Hughes	110	.....	1918	Jack Hare Jr.	C. Peak	115	11,250
1876	Shirley	G. Barbee	110	.....	1919	Sir Barton	J. Loftus	126	24,500
1877	Cloverbrook	C. Holloway	110	.....	1920	Man o' War	C. Kummer	126	23,000
1878	Duke of Magenta	C. Holloway	110	.....	1921	Broomspun	F. Coltietti	114	43,000
1879	Harold	W. Hughes	110	\$2,550	1922	Pillory	L. Morris	114	51,000
1880	Grenada	W. Hughes	110	2,000	1923	Vigil	B. Marinelli	114	52,000
1881	Saunterer	W. Costello	110	1,950	1924	Nellie Morse	J. Merimee	121	54,000
1882	Vanguard	W. Costello	110	1,250	1925	Coventry	C. Kummer	126	52,700
1883	Jacobus	G. Barbee	110	1,635	1926	Display	J. Maiben	126	53,625
1883	Jacobus	G. Barbee	110	1,635	1927	Bostonian	A. Abel	126	53,100
1884	Knight of Ellerslie	S. H. Fisher	110	1,905	1928	Victorian	R. Workman	126	60,000
1885	Tecumseh	J. McLaughlin	118	2,160	1929	Dr. Freeland	L. Schaefer	126	52,325
1886	The Bard	S. H. Fisher	118	2,050	1930	Gallant Fox	E. Sande	126	51,925
1887	Donboyne	W. Donohue	118	1,675	1931	Mate	G. Ellis	126	48,225
1888	Refund	F. Littlefield	118	1,185	1932	Burgoo King	E. James	126	50,375
1889	Buddhist	H. Anderson	118	1,130	1933	Head Play	C. Kutsinger	126	26,850
1894	Assignee	F. Taral	122	1,830	1934	High Quest	R. Jones	126	25,175
1895	Belmar	F. Taral	115	1,350	1935	Omaha	W. Saunders	126	25,325
1896	Margrave	H. Griffin	115	1,350	1936	Bold Venture	G. Woolf	126	27,325
1897	Paul Kauvar	Thorpe	108	1,420	1937	War Admiral	C. Kutsinger	126	45,600
1898	Sly Fox	W. Simms	120	1,450	1938	Dauber	M. Peters	126	51,857
1899	Half Time	R. Clawson	104	1,580	1939	Challedon	G. Seabo	126	53,710
1900	Hindus	H. Spencer	106	1,900	1940	Bimelech	F. A. Smith	126	53,230
1901	The Parader	Landry	118	1,605	1941	Whirlaway	E. Arcaro	126	49,365
1902	Old England	L. Jackson	115	2,240	1942	Alsab	B. James	126	58,175
1903	Flocarine	W. Gannon	113	1,875	1943	Count Fleet	J. Longden	126	43,190
1904	Bryn Mawr	E. Hildebrand	108	2,355	1944	Pensive	C. McCreary	126	60,075
1905	Cairngorm	W. Davis	114	2,145	1945	Polynesian	W. D. Wright	126	66,170
1906	Whimsical	W. Miller	108	2,355	1946	Assault	W. Mehrtens	126	96,620
1907	Don Enrique	G. Mountain	107	2,260	1947	Faultless	D. Dodson	126	98,005
1908	Royal Tourist	E. Dugan	112	2,455	1948	Citation	E. Arcaro	126	91,870
1909	Effendi	W. Doyle	116	3,225	1949	Capot	T. Atkinson	126	79,985
1910	Layminster	R. Estep	84	3,300	1950	Hill Prince	E. Arcaro	126	56,115
1911	Watervale	E. Dugan	112	2,700	1951	Bold	E. Arcaro	126	83,110
1912	Colonel Holloway	C. Turner	107	1,450	1952	Bud Man	C. McCreary	126	86,135
1913	Buskin	J. Butwell	117	1,670	1953	Native Dancer	E. Guerin	126	65,200
1914	Holiday	A. Schuttinger	108	1,355	1954	Hasty Road	J. Adams	126	91,600
1915	Rhine Maiden	D. Hoffman	104	1,275					

## SANTA ANITA DERBY

Santa Anita Park; 3-year-olds; 1½ miles

Distance 1½ miles prior to 1938; 1¼ miles in 1947.

Year	Winner	Jockey	Wt.	Win val.	1946	Knockdown	R. Permane	122	\$74,680
1935	Gille	S. Coucci	126	\$19,650	1947	On Trust	J. Longden	118	81,750
1936	He Did	W. D. Wright	126	26,000	1948	Salmagundi	J. Longden	118	79,800
1937	Fairy Hill	M. Peters	121	45,425	1949	Old Rockport	G. Glisson	118	94,700
1938	Stagehand	J. Westrope	118	42,350	1950	Your Host	J. Longden	118	89,800
1939	Ciencia	C. Bierman	115	41,850	1951	Rough'n Tumble	E. Arcaro	118	81,500
1940	Sweepida	R. Neves	120	43,850	1952	Hill Gail	T. Atkinson	118	92,900
1941	Porter's Cap	L. Haas	120	44,975	1953	Chanlea	E. Arcaro	118	84,500
1945	Bymeabond	G. Woolf	119	37,250	1954	Determine	R. York	118	84,800

## SANTA ANITA HANDICAP

Santa Anita Park; 3-year-olds and over; 1¼ miles.

Year	Winner, age	Jockey	Wt.	Win val.	1946	War Knight (6).....	J. Adams.....	115	\$101,205
1935	Azucar (7).....	G. Woolf.....	117	\$108,400	1947	Olhaverly (8).....	M. Peterson.....	116	98,900
1936	Top Row (5).....	W. D. Wright.....	116	104,600	1948	Talon (6).....	E. Arcaro.....	122	102,500
1937	Rosemont (5).....	H. Richards.....	124	90,700	1949	Vulcan's Forge (4).....	D. Gorman.....	119	102,000
1938	Stagehand (3).....	N. Wall.....	100	91,450	1950	Noor (5).....	J. Longden.....	110	97,900
1939	Kayak II (4).....	J. Adams.....	110	91,100	1951	Moonrush (5).....	J. Longden.....	114	97,900
1940	Seabiscuit (7).....	J. Pollard.....	130	86,650	1952	Miche (7).....	J. Covalli.....	115	104,100
1941	Bay View (4).....	N. Wall.....	108	89,360	1953	Mark-Ye-Well (4).....	E. Arcaro.....	130	97,900
1945	Thumbs Up (6).....	J. Longden.....	130	82,922	1954	Rejected (4).....	W. Shoemaker.....	119	105,900

## SUBURBAN HANDICAP

Belmont Park; 3-year-olds and over; 1½ miles.

Run at Sheepshead Bay prior to 1913.

Year	Winner, age	Jockey	Wt.	Win val.	1921	Audacious (5)	C. Kummer	120	\$ 8,103
1884	Gen. Monroe (6)	W. Donohue	124	\$ 4,945	1922	Captain Alcock (5)	C. Ponce	108	8,200
1885	Pontiac (4)	H. Olney	102	5,855	1923	Grey Lag (5)	E. Sande	135	7,800
1886	Troubadour (4)	W. Fitzpatrick	115	5,697	1924	Mad Hatter (8)	E. Sande	125	9,150
1887	Eurus (4)	G. Davis	102	6,065	1925	Sting (4)	B. Bruening	122	11,600
1888	Elkwood (5)	W. Martin	119	6,812	1926	Crusader (3)	J. Callahan	104	13,150
1889	Raceland (4)	E. Garrison	120	6,900	1927	Crusader (4)	C. Kummer	127	11,875
1890	Salvator (4)	I. Murphy	127	6,900	1928	Dolan (4)	J. Callahan	105	13,875
1891	Loantaka (5)	M. Bergen	110	9,900	1929	Bateau (4)	E. Ambrose	112	14,100
1892	Montana (4)	E. Garrison	115	17,750	1930	Petee Wrack (5)	E. Sande	122	11,850
1893	Lowlander (5)	P. McDermott	105	17,750	1931	Mokamat (4)	A. Robertson	123	11,200
1894	Ramapo (4)	F. Taral	120	12,070	1932	White Clover II (6)	R. Workman	115	11,100
1895	Lazzarone (4)	A. Hamilton	115	4,730	1933	Equipoise (5)	R. Workman	132	7,250
1896	Henry of Navarre (5)	H. Griffin	129	5,850	1934	Ladysman (4)	S. Coucci	114	5,750
1897	Ben Brush (4)	W. Simms	123	5,850	1935	Head Play (5)	C. Kutsinger	114	12,175
1898	Tillo (4)	A. Clayton	119	6,800	1936	Firethorn (4)	H. Richards	116	12,125
1899	Imp (5)	N. Turner	114	6,800	1937	Aneroid (4)	C. Rosengarten	110	10,950
1900	Kinley Mack (4)	P. McCue	125	6,800	1938	Snark (5)	J. Longden	120	17,050
1901	Alcedo (4)	H. Spencer	112	7,800	1939	Cravat (4)	J. Westrope	121	17,750
1902	Gold Heels (4)	O. Wonderly	124	7,800	1940	Eight Thirty (4)	H. Richards	127	19,850
1903	Africander (3)	G. Fuller	110	16,490	1941	Your Chance (4)	D. Meade	114	25,200
1904	Hermis (5)	A. Redfern	127	16,800	1942	Market Wise (4)	B. James	124	27,800
1905	Beldame (4)	F. O'Neill	123	16,800	1943	Don Bingo (4)	J. Renick	104	27,600
1906	Go Between (5)	W. Shaw	116	16,800	1944	Aletris (5)	H. Lindberg	108	39,210
1907	Nealon (4)	W. Dugan	113	16,800	1945	Devil Diver (6)	E. Arcaro	132	34,995
1908	Ballot (4)	J. Notter	127	19,750	1946	Armed (5)	D. Dodson	130	43,000
1909	Fitz Herbert (3)	E. Dugan	105	3,850	1947	Assault (4)	E. Arcaro	130	40,000
1910	Olambala (4)	G. Archibald	115	4,800	1948	Harmonic (4)	W. Mehrtens	109	39,700
1913	Whisk Broom II (6)	J. Notter	139	3,000	1949	Vulcan's Forge (4)	E. Arcaro	124	43,200
1915	Stromboli (4)	C. Turner	122	3,925	1950	Loser Weeper (5)	N. Combest	115	41,400
1916	Friar Rock (3)	M. Garner	101	3,450	1951	Busanda (4)	K. Stuart	102	42,100
1917	Boots (6)	J. Loftus	122	4,900	1952	One Hitter (6)	T. Atkinson	112	41,900
1918	Johref (3)	F. Robinson	110	5,850	1953	Tom Fool (4)	T. Atkinson	128	40,400
1919	Corn Tassel (5)	L. Ensor	108	5,200	1954	Straight Face	T. Atkinson	118	44,400
1920	Paul Jones (3)	A. Schuttinger	106	6,350					

## TRAVERS STAKES—Saratoga; 3-year-olds; 1½ miles.

Distance 1½ miles prior to 1890; 1½ miles in 1890, 1891, and 1892; 1½ miles in 1893, 1894 and 1897; 1½ miles in 1895, 1901, 1902, and 1903. Run as Travers Midsummer Derby from 1927 to 1932, inclusive, Run at Belmont Park from 1943 to 1945, inclusive.

Year	Winner	Jockey	Wt.	Win val.	Year	Winner	Jockey	Wt.	Win val.
1864	Kentucky	Gilpatrick	100	\$2,950	1892	Azra	Clayton	122	\$ 2,750
1865	Maiden	Sewell	97	3,400	1893	Stowaway	McDermott	107	2,450
1866	Merrill	Abe	100	3,500	1894	Henry of Navarre	Taral	125	2,350
1867	Ruthless	Gilpatrick	103	2,850	1895	Liza	Griffin	104	1,125
1868	The Banshee	Smith	97	3,150	1897	Rensselaer	Taral	126	1,425
1869	Glennel	C. Miller	110	3,000	1901	Blues	Shaw	126	6,750
1870	Kingfisher	C. Miller	110	4,950	1902	Hermis	Rice	111	6,750
1871	Harry Bassett	W. Miller	110	5,600	1903	Ada Nay	F. O'Neill	106	8,150
1872	Joe Daniels	J. Rowe	110	5,500	1904	Broomstick	T. Burns	129	5,850
1873	Tom Bowling	R. Swim	110	5,400	1905	Dandelion	Shaw	111	8,350
1874	Attila	Barbee	110	5,050	1906	Gallavant	W. Miller	111	5,800
1875	D'Artagnan	Barbee	110	4,850	1907	Frank Gill	Notter	129	5,800
1876	Sultana	Hayward	107	3,700	1908	Dorante	J. Lee	116	5,800
1877	Baden Baden	Sayers	110	4,550	1909	Hilarious	Scoville	129	5,800
1878	Duke of Magenta	Hughes	118	4,250	1910	Dalmatian	C. H. Shilling	129	4,825
1879	Falsetto	I. Murphy	118	4,950	1913	Rock View	T. McTaggart	129	2,725
1880	Grenada	Hughes	118	3,750	1914	Roamer	J. Butwell	123	3,000
1881	Hindoo	J. McLaughlin	118	2,950	1915	Lady Rotha	M. Garner	106	2,150
1882	Carley B.	Quantrell	115	3,450	1916	Spur	J. Loftus	129	3,125
1883	Barnes	J. McLaughlin	118	3,400	1917	Omar Khayyam	J. Butwell	129	5,350
1884	Rataplan	Fitzpatrick	118	4,150	1918	Sun Briar	W. Knapp	120	7,700
1885	Bersan	Spellman	118	4,025	1919	Hannibal	L. Ensor	120	9,835
1886	Inspector B.	J. McLaughlin	118	3,825	1920	Man o' War	A. Schuttinger	129	9,275
1887	Carey	Blaylock	118	3,825	1921	Sporting Blood	L. Lyke	116	10,275
1888	Sir Dixon	J. McLaughlin	118	4,625	1922	Little Chief	L. Fator	123	11,325
1889	Long Dance	Barnes	118	3,700	1923	Wilderness	B. Marinelli	120	13,550
1890	Sir John	Bergen	118	4,925	1924	Sun Flag	F. Keogh	115	14,675
1891	Vallera	R. Williams	122	2,900	1925	Dangerous	C. Kummer	115	13,425



## Travers Stakes (Cont.)

1926	Mars.....	F. Coltiletti.....	123	\$15,050	1941	Whirlaway.....	A. Robertson.....	130	\$16,900
1927	Brown Bud.....	L. Fator.....	120	29,925	1942	Shut Out.....	E. Arcaro.....	130	17,825
1928	Petee-Wrack.....	S. O'Donnell.....	117	30,550	1943	Eurasian.....	S. Brooks.....	112	19,850
1929	Beacon Hill.....	A. Robertson.....	117	31,820	1944	By Jimminy.....	E. Arcaro.....	126	25,015
1930	Jim Dandy.....	F. J. Baker.....	120	27,050	1945	Adonis.....	C. McCreary.....	110	28,680
1931	Twenty Grand.....	L. McAttee.....	126	33,000	1946	Natchez.....	T. Atkinson.....	124	24,750
1932	War Hero.....	J. Gilbert.....	115	23,150	1947	Young Peter.....	T. May.....	124	19,375
1933	Inlander.....	R. Jones.....	126	21,050	1948	Ace Admiral.....	T. Atkinson.....	108	19,650
1934	Observant.....	L. Humphries.....	112	14,650	1949	Arise.....	C. Errico.....	108	16,000
1935	Gold Foam.....	S. Coucci.....	112	14,675	1950	Lights Up.....	G. Hettinger.....	110	16,350
1936	Granville.....	J. Stout.....	127	14,700	1951	Battlefield.....	E. Arcaro.....	123	15,000
1937	Burning Star.....	W. D. Wright.....	117	14,550	1952	One Count.....	E. Guerin.....	126	16,450
1938	Thanksgiving.....	E. Arcaro.....	117	14,400	1953	Native Dancer.....	E. Guerin.....	126	18,850
1939	Eight Thirty.....	H. Richards.....	117	16,575	1954	Fisherman.....	H. Woodhouse.....	120	19,500
1940	Fenelon.....	J. Stout.....	122	17,425					

## WASHINGTON PARK FUTURITY

## Washington Park; 2-year-olds; 3/4 mile.

Year	Winner	Jockey	Wt.	Win val.	Year	Winner	Jockey	Wt.	Win val.
1937	Tiger.....	A. Robertson.....	117	\$26,135	1947	Bewitch.....	D. Dodson.....	119	\$63,153
1940	Porter's Cap.....	C. Bierman.....	117	30,780	1948	Model Cadet.....	A. Skoronski.....	118	60,750
1941	Alsab.....	R. L. Vedder.....	119	32,575	1949	Curtice.....	O. Scurluck.....	115	57,850
1942	Occupation.....	L. Balaski.....	122	58,475	1950	To Market.....	A. Rivera.....	122	57,390
1943	Occup.....	L. Whiting.....	113	43,625	1951	Oh Leo.....	P. Bailey.....	122	62,700
1944	Free for All.....	O. Grohs.....	122	47,850	1952	Mr. Paradise.....	E. Arcaro.....	116	79,710
1945	Revoked.....	A. Bodiou.....	118	56,700	1953	Hasty Road.....	E. Arcaro.....	122	99,645
1946	Education.....	J. Adams.....	118	65,125	1954	Georgian.....	C. McCreary.....	116	88,381

## WIDENER

## Hialeah Park; 3-year-olds and over; 1 1/4 miles

Run as Widener Challenge Cup Handicap prior to 1938.					Run as Widener Handicap from 1938 to 1944, inclusive.				
Year	Winner, age	Jockey	Wt.	Win val.	Year	Winner, age	Jockey	Wt.	Win val.
1936	Mantagna (4).....	E. Litzenberger.....	109	\$10,150	1947	Armed (6).....	D. Dodson.....	129	\$43,900
1937	Columbiana (4).....	H. Le Blanc.....	103	52,000	1948	El Mono (4).....	P. Roberts.....	112	43,800
1938	War Admiral (4).....	C. Kurtsinger.....	130	49,550	1949	Coaltown (4).....	T. Atkinson.....	123	42,300
1939	Bull Lea (4).....	I. Anderson.....	119	46,450	1950	Royal Governor (6).....	C. Rogers.....	118	43,000
1940	Many Stings (5).....	R. Donoso.....	109	52,000	1951	Sunglow (4).....	D. Dodson.....	116	54,100
1941	Big Pebble (5).....	G. Seabo.....	109	51,800	1952	Spartan Valor (4).....	J. Stout.....	119	51,300
1942	The Rhymer (4).....	E. Arcaro.....	111	53,950	1953	Oil Capital (6).....	C. McCreary.....	114	93,200
1944	Four Freedoms (4).....	E. Arcaro.....	109 1/2	29,350	1954	Landlocked (4).....	J. Heckmann.....	116	102,200
1946	Armed (5).....	D. Dodson.....	128	45,700					

## WOOD MEMORIAL

## Jamaica; 3-year-olds; 1 1/4 miles

Run as Wood Stakes prior to 1927. Distance 1 mile and 70 yards from 1925 to 1939, inclusive. Run as Wood Memorial Stakes from 1927 to 1941, inclusive. Run in two divisions in 1944, 1945, and 1947.

Year	Winner	Jockey	Wt.	Win val.	Year	Winner	Jockey	Wt.	Win val.
1925	Backbone.....	I. Parke.....	110	\$ 7,600	1942	Requested.....	W. D. Wright.....	120	\$22,900
1926	Pompey.....	B. Breuning.....	120	8,700	1943	Count Fleet.....	J. Longden.....	126	20,150
1927	Saxon.....	G. Ellis.....	117	9,050	1944	Stir Up.....	E. Arcaro.....	126	19,625
1928	Distraction.....	D. McAuliffe.....	120	11,300	1944	Lucky Draw.....	J. Longden.....	126	20,115
1929	Essare.....	M. Garner.....	110	11,000	1945	Jeep.....	A. Kirkland.....	126	18,945
1930	Gallant Fox.....	E. Sande.....	120	10,150	1945	Hoop Jr.....	E. Arcaro.....	126	18,945
1931	Twenty Grand.....	C. Kurtsinger.....	120	10,200	1946	Assault.....	W. Mehrtens.....	126	22,600
1932	Universe.....	L. McAttee.....	120	10,400	1947	Phalanx.....	E. Arcaro.....	126	31,325
1933	Mr. Khayyam.....	P. Wallis.....	122	3,760	1947	I Will.....	E. Arcaro.....	126	31,625
1934	High Quest.....	D. Bellizzi.....	120	3,990	1948	My Request.....	D. Dodson.....	126	34,600
1935	Today.....	R. Workman.....	112	11,350	1949	Olympia.....	E. Arcaro.....	126	31,850
1936	Teufel.....	E. Litzenberger.....	112	10,775	1950	Hill Prince.....	E. Arcaro.....	126	34,500
1937	Melodist.....	J. Longden.....	120	19,105	1951	Repetoire.....	P. McLean.....	126	35,250
1938	Fighting Fox.....	J. Stout.....	120	17,450	1952	Master Fiddle.....	D. Gorman.....	126	45,200
1939	Johnstown.....	J. Stout.....	120	17,675	1953	Native Dancer.....	E. Guerin.....	126	87,000
1940	Dit.....	L. Haas.....	120	19,225	1954	Correlation.....	W. Shoemaker.....	126	86,000
1941	Market Wise.....	D. Meade.....	120	16,650					

## Mihalo Sets Pro Walking Mark

On Aug. 14, 1954, Bill Mihalo of Detroit, who holds more than thirty world profes-

sional walking records, set a 60-mile mark of 8 hours 54 minutes 2 seconds. Mihalo's 100-yard record is 14 seconds and his time for the mile is 6:04.9.

## WORLD RECORDS

Distance	Horse, age, weight, track and location	Date	Time
$\frac{1}{4}$	Big Racket, 4, 111, Hipodromo de las Americas, Mexico City, Mexico.....	February 5, 1945	:20%
$2\frac{1}{2}$ f.	Tie Score, 5, 115, Hipodromo de las Americas, Mexico City, Mexico.....	February 5, 1946	:26%
	Temerario, 2, 117, Hipodromo de las Americas, Mexico City, Mexico.....	March 29, 1953	:26%
$\frac{1}{8}$	Atoka, 6, 105, Butte, Mont.....	September 7, 1906	:33½
$3\frac{1}{2}$ f.	Joe Blair, 5, 115, Juarez, Mexico.....	February 5, 1916	:39
$\frac{1}{2}$	Tie Score 4, 111, Hipodromo de las Americas, Mexico City, Mexico.....	April 1, 1945	:45%
	Big Ping, 7, 121, Hipodromo de las Americas, Mexico City, Mexico.....	February 5, 1953	:45%
$4\frac{1}{2}$ f.	Saggy, 2, 117, Havre de Grace, Md.....	April 23, 1947	:51%
$\frac{3}{8}$	Encantadora, 3, 115, Centennial Park, Littleton, Colo.....	August 9, 1951	:57
$5\frac{1}{2}$ f.	Nance's Ace, 3, 112, Tropical Park, Coral Gables, Fla.....	December 27, 1944	1:03%
$5\frac{3}{4}$ f.	Fighting Fox, 4, 126, Empire City, Yonkers, N. Y.....	July 8, 1939	1:07%
	Doublrab, 4, 130, Empire City, Yonkers, N. Y.....	July 18, 1942	1:07%
$\frac{3}{4}$	*Gelding by Broken Tendril, 3, 123, Brighton, England.....	August 6, 1929	1:06%
	Bolero, 4, 122, Golden Gate Fields, Albany, Calif.....	May 27, 1950	1:08%
$6\frac{1}{2}$ f.	Snark, 4, 109, Hialeah Park, Hialeah, Fla.....	February 9, 1937	1:15%
$\frac{7}{8}$	Imbros, 4, 118, Santa Anita Park, Arcadia, Calif.....	January 2, 1954	1:20%
1.	Citation, 5, 128, Golden Gate Fields, Albany, Calif.....	June 3, 1950	1:33%
1 mi. 70 yd.	South Dakota, 3, 122, River Downs, Cincinnati, Ohio.....	August 4, 1945	1:40
$1\frac{1}{16}$	Count Speed, 4, 122, Golden Gate Fields, Albany, Calif.....	October 4, 1947	1:41
$1\frac{1}{8}$	Noor, 5, 123, Golden Gate Fields, Albany, Calif.....	June 17, 1950	1:46%
$1\frac{1}{4}$	Fleet Bird, 4, 123, Golden Gate Fields, Albany, Calif.....	October 24, 1953	1:52%
$1\frac{1}{2}$	Noor, 5, 127, Golden Gate Fields, Albany, Calif.....	June 24, 1950	1:58%
$1\frac{3}{8}$	Man o' War, 3, 126, Belmont Park, Elmont, N. Y.....	June 12, 1920	2:14%
$1\frac{1}{2}$	The Bastard, 3, 124, Newmarket, England.....	October 18, 1929	2:23
$1\frac{5}{8}$	Ace Admiral, 4, 122, Santa Anita Park, Arcadia, Calif.....	July 23, 1949	2:39%
1 mi. $5\frac{1}{2}$ f.	Distribute, 9, 109, River Downs, Cincinnati, Ohio.....	September 7, 1940	2:51%
$1\frac{3}{4}$	Buen Ojo, aged, 133, Montevideo, Uruguay, S. A.....	January 8, 1922	2:52%
$1\frac{7}{8}$	Pharawell, 5, 119, Gulfstream Park, Hallandale, Fla.....	April 8, 1947	3:13%
2.	Polazel, 3, 142, Salisbury, England.....	July 8, 1924	3:15
2 mi. 40 yd.	Winning Mark, 4, 107, Thistle Down Park, Cleveland, Ohio.....	July 20, 1940	3:29%
2 mi. 70 yd.	Filisteo, 7, 116, Pimlico, Baltimore, Md.....	October 30, 1941	3:30%
$2\frac{1}{8}$	Royal Castle, 3, 116, Jamaica, N. Y.....	November 15, 1950	3:30%
$2\frac{1}{4}$	Centurion, 5, 119, Newbury, England.....	September 29, 1923	3:35
$2\frac{3}{8}$	Santiago, 5, 112, Narragansett Park, Pawtucket, R. I.....	September 27, 1941	3:51%
$2\frac{1}{2}$	Dakota, 4, 116, Lingfield, England.....	May 27, 1927	3:37%
$2\frac{5}{8}$	Wiki Jack, 4, 97, Tijuana, Mexico.....	February 8, 1925	4:15
$2\frac{1}{2}$	Miss Grillo, 6, 118, Pimlico, Md.....	November 12, 1948	4:14%
$2\frac{3}{4}$	†Worthman, 5, 101, Tijuana, Mexico.....	February 22, 1925	4:51%
$2\frac{3}{4}$	Shot Put, 4, 126, Washington Park, Homewood, Ill.....	August 14, 1940	4:48%
$2\frac{7}{8}$	†Bosh, 5, 100, Tijuana, Mexico.....	March 8, 1925	5:23
3.	Farragut, 5, 113, Agua Caliente, Mexico.....	March 9, 1941	5:15
$3\frac{3}{8}$	Winning Mark, 4, 104, Washington Park, Homewood, Ill.....	August 21, 1940	6:13
4.	Sotemia, 5, 119, Churchill Downs, Louisville, Ky.....	October 7, 1912	7:10%

\* 3/4 mile course at Brighton is started from a hill and is down grade to within one-third of a mile of the finish.  
 † Track heavy. ‡ Track sloppy.

## Straight Course

$\frac{3}{4}$	Bob Wade, 4, 122, Butte, Mont.....	August 20, 1890	:21%
$\frac{3}{8}$	King Rhymer, 2, 118, Santa Anita Park, Arcadia, Calif.....	February 27, 1947	:32
$\frac{1}{2}$	Gloaming, 6, 127, Trentham, Wellington, New Zealand.....	January 12, 1921	:45
$4\frac{1}{2}$ f.	The Pimpernel, 2, 118, Belmont Park, Elmont, N. Y.....	May 17, 1951	:49%
$\frac{3}{4}$	Devineress, 3, 103, Epsom Downs, Epsom, England.....	June 2, 1933	:54%
$5\frac{1}{2}$ f.	Delegate, 7, 113, Belmont Park, Elmont, N. Y.....	October 10, 1951	1:01%
$\frac{3}{4}$	Artful, 2, 130, Morris Park, New York, N. Y.....	October 15, 1904	1:08
$6\frac{1}{2}$ f.	Porter's Mite, 2, 119, Belmont Park, Elmont, N. Y.....	September 17, 1938	1:14%
	Native Dancer, 2, 122, Belmont Park, Elmont, N. Y.....	September 27, 1952	1:14%
*Abt½	High Strung, 2, 122, Belmont Park, Elmont, N. Y.....	September 15, 1928	1:19
$\frac{7}{8}$	First Edition, 4, 126, Hurst Park, Hampton Court England.....	May 25, 1926	1:20
1.	Mopsus, 3, 105, Brighton, England.....	June 22, 1939	1:32
$1\frac{1}{4}$	Banquet, 3, 108, Monmouth Park, New Jersey.....	July 17, 1890	2:03%

\* 165 feet short of 7/8 mile.

## New York Wagering, Attendance Records

Type of record	Amount	Track	Date
Mutuel handle (8 races)	\$5,016,745	Belmont	September 22, 1945
Mutuel handle (7 races)	4,330,471	Jamaica*	November 3, 1945
Mutuel handle (1 race)	763,127	Belmont	September 27, 1945
Daily double	251,682	Jamaica	October 30, 1945
Attendance	64,670	Jamaica	May 30, 1945

\* Empire City meeting.

# Man o' War's Record

(Bred by August Belmont. Owned by Glen Riddle Farm.)

1919									
Date	Track	Race	Dist.	Wt.	Fin.	Time	Odds	Earnings	
June 6	Belmont Park	Purse	$\frac{1}{2}$ st	115	1	:59	3-5	\$ 500	
June 9	Belmont Park	Keene Memorial Stakes	$\frac{5}{8}$ f st	115	1	1:05 $\frac{3}{4}$	7-10	4,200	
June 21	Jamaica	Youthful Stakes	$\frac{5}{8}$ f	120	1	1:06 $\frac{3}{4}$	1-2	3,850	
June 23	Aqueduct	Hudson Stakes	$\frac{1}{2}$	130	1	1:01 $\frac{1}{2}$	1-10	2,825	
July 5	Aqueduct	Tremont Stakes	$\frac{1}{2}$	130	1	1:13	1-10	4,800	
Aug. 2	Saratoga	United States Hotel Stakes	$\frac{1}{2}$	130	1	1:12 $\frac{1}{2}$	9-10	7,600	
Aug. 13	Saratoga	Sanford Memorial Stakes	$\frac{1}{2}$	130	2	1:11 $\frac{1}{4}$	11-20	700	
Aug. 23	Saratoga	Grand Union Hotel Stakes	$\frac{1}{2}$	130	1	1:12	11-20	7,600	
Aug. 30	Saratoga	Hopeful Stakes	$\frac{1}{2}$	130	1	1:13	9-20	24,600	
Sept. 13	Belmont Park	Belmont Futurity	$\frac{3}{4}$ st	127	1	1:11 $\frac{1}{2}$	1-2	26,555	
Total								\$83,320	

1920									
Date	Track	Race	Dist.	Wt.	Fin.	Time	Odds	Earnings	
May 18	Pimlico	Preakness Stakes	1 $\frac{1}{8}$	126	1	1:51 $\frac{1}{2}$	4-5	\$23,000	
May 29	Belmont Park	Withers Stakes	1	118	1	1:35 $\frac{1}{4}$	1-7	4,825	
June 12	Belmont Park	Belmont Stakes	1 $\frac{1}{2}$	126	1	2:14 $\frac{1}{4}$	1-25	7,950	
June 22	Jamaica	Stuyvesant Handicap	1	135	1	1:41 $\frac{1}{2}$	1-100	3,850	
July 10	Aqueduct	Dwyer Stakes	1 $\frac{1}{2}$	126	1	1:49 $\frac{1}{2}$	1-5	4,850	
Aug. 7	Saratoga	Miller Stakes	1 $\frac{1}{2}$	131	1	1:56 $\frac{3}{4}$	1-30	4,700	
Aug. 21	Saratoga	Travers Stakes	1 $\frac{1}{2}$	129	1	2:01 $\frac{1}{2}$	2-9	9,275	
Sept. 4	Belmont Park	Lawrence Realization Stakes	1 $\frac{1}{2}$	126	1	2:40 $\frac{1}{2}$	1-100	15,040	
Sept. 11	Belmont Park	Jockey Club Stakes	1 $\frac{1}{2}$	118	1	2:28 $\frac{3}{4}$	1-100	5,850	
Sept. 18	Havre de Grace	Potomac Handicap	1 $\frac{1}{2}$	138	1	1:44 $\frac{1}{2}$	15-100	6,800	
Oct. 12	Kenilworth Park	Kenilworth Park Gold Cup	1 $\frac{1}{2}$	120	1	2:03	1-20	80,000	
Total								\$166,140	

## RECAPITULATION

Year	Age	Sts.	1st	2d	3d	Unp.	Earnings
1919	2	10	9	1	0	0	\$ 83,325
1920	3	11	11	0	0	0	166,140
Totals		21	20	1	0	0	\$249,465

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Address—925 Chrysler Building, New York 17, N. Y.

### Collisteo Takes Queen's Plate

Collisteo, a 3-year-old colt owned by the Bur-Fit Stable, won the ninety-fifth running of the Queen's Plate, the oldest stakes event in North America, at Wood-

bine Park, Toronto, on June 12, 1954. The race had a gross value of \$29,680 and the winner earned \$22,305. Collisteo was ridden by Chris Rogers and the time for the mile and an eighth was 1:52.



## LEADING JOCKEYS SINCE 1935

Year	Jockey	Mounts	Win- ners	Un- placed	Pct.
1935	C. Stevenson	1,099	206	578	.19
1936	B. James	1,106	245	505	.22
1937	J. Adams	1,265	260	642	.21
1938	J. Longden	1,150	236	575	.21
1939	D. Meade	1,284	255	628	.20
1940	E. Dew	1,377	287	709	.21
1941	D. Meade	1,164	210	611	.18
1942	J. Adams	1,120	245	540	.22
1943	J. Adams	1,069	228	511	.21
1944	T. Atkinson	1,539	287	808	.19
1945	J. D. Jessop	1,085	290	445	.27
1946	T. Atkinson	1,377	233	758	.17
1947	J. Longden	1,327	316	566	.24
1948	J. Longden	1,197	319	494	.27
1949	G. Glisson	1,347	270	679	.20
1950	W. Shoemaker	1,640	388	756	.24
	J. Culmone	1,676	383	787	.23
1951	C. Burr	1,162	310	585	.24
1952	A. DeSpirito	1,482	390	633	.26
1953	W. Shoemaker	1,683	485	686	.29

## LEADING TRAINERS SINCE 1935

(Winners saddled)

Year	Name	Winners	Earnings
1935	H. Jacobs	114	\$95,155
1936	H. Jacobs	177	155,789
1937	H. Jacobs	134	142,474
1938	H. Jacobs	109	116,609
1939	H. Jacobs	106	100,907
1940	D. Womeldorf	108	112,137
1941	H. Jacobs	123	165,964
1942	H. Jacobs	133	186,371
1943	H. Jacobs	128	210,775
1944	H. Jacobs	117	306,821
1945	S. Lipiec	127	238,361
1946	W. Molter	122	329,725
1947	W. Molter	155	833,970
1948	W. Molter	184	1,015,547
1949	W. Molter	129	696,184
	W. H. Bishop	129	236,131
1950	R. H. McDaniel	156	441,590
1951	R. H. McDaniel	164	539,204
1952	R. H. McDaniel	168	573,837
1953	R. H. McDaniel	211	751,957

## LEADING MONEY-WINNING OWNERS

Year	Name	Amount
1935	A. G. Vanderbilt	\$303,605
1936	Milky Way Farm Stable	206,450
1937	Mrs. Charles S. Howard	214,559
1938	H. Maxwell Howard	226,495
1939	Belair Stud	284,250
1940	Charles S. Howard	334,120
1941	Calumet Farm	475,091
1942	Greentree Stable	414,432
1943	Calumet Farm	267,915
1944	Calumet Farm	601,660
1945	Maine Chance Farm	589,170
1946	Calumet Farm	564,095
1947	Calumet Farm	1,402,436
1948	Calumet Farm	1,269,710
1949	Calumet Farm	1,128,942
1950	Brookmeade Stable	651,399
1951	Greentree Stable	637,242
1952	Calumet Farm	1,283,197
1953	A. G. Vanderbilt	987,306

## TOP MONEY-WINNING HORSES

Year	Horse and age	Starts	1st	Amount
1935	Omaha (3)	9	6	\$142,255
1936	Granville (3)	11	7	110,295
1937	Seabiscuit (4)	15	11	168,580
1938	Stagehand (3)	15	8	189,710
1939	Challedon (3)	15	9	184,535
1940	Bimelech (3)	7	4	110,005
1941	Whirlaway (3)	20	13	272,386
1942	Shut Out (3)	12	8	238,872
1943	Count Fleet (3)	6	6	174,055
1944	Pavot (2)	8	8	179,040
1945	Busher (3)	13	10	273,735
1946	Assault (3)	15	8	424,195
1947	Armed (6)	17	11	376,325
1948	Citation (3)	20	19	709,470
1949	Ponder (3)	21	9	321,825
1950	Noor (5)	12	7	346,940
1951	Counterpoint (3)	15	7	250,525
1952	Crafty Admiral (4)	16	9	277,225
1953	Native Dancer (3)	10	9	513,425

## Facts on Citation

Record by Years						
Year	Age	Sts.	1st	2d	3d	Unp.
1947	2	9	8	1	0	0
1948	3	20	19	1	0	0
1949	4	9	0	0	0	0
1950	5	9	2	7	0	0
1951	6	7	3	1	2	1
Totals	45	32	10	2	1	1

## Stake Victories

1947

Date	Event	Dist.	Wt.	Time	Earnings
July 30	Elementary Stakes	1/4	122	1:10 3/4	\$17,300
Oct. 4	Belmont Futurity	6 1/2	122	1:15 1/4	78,430
Nov. 8	Pimlico Futurity	1 1/16	119	1:48 3/4	36,675

1948

Feb. 11	Seminole Handicap	7/8	112	1:23	8,525
Feb. 18	Everglades Handicap	1 1/4	126	1:49	7,200
Feb. 28	Flamingo Stakes	1 1/4	126	1:48 3/4	43,500

Apr. 17	Chesapeake Stakes	1 1/4	122	1:45 1/4	19,750
Apr. 27	Derby Trial	1	118	1:37 1/2	8,525
May 1	Kentucky Derby	1 1/4	126	2:05 1/2	83,400
May 15	Preakness Stakes	1 1/4	126	2:02 3/4	91,870
May 29	Jersey Stakes	1 1/4	126	2:03	43,300
June 12	Belmont Stakes	1 1/2	126	2:28 3/4	77,700
July 5	Stars and Stripes	1 1/4	119	1:49 1/2	38,000
Aug. 28	American Derby	1 1/4	126	2:01 3/4	66,450
Sept. 29	Sysonby Mile	1	119	1:36	20,200
Oct. 2	Jockey Club Gold Cup	2	117	3:21 3/4	72,700
Oct. 16	Empire City Gold Cup	1 1/2	119	2:42 1/4	75,600
Oct. 29	*Pimlico Special	1 1/4	120	1:59 1/4	10,000
Dec. 11	Tanforan Handicap	1 1/4	123	2:02 1/2	31,800

\* Walkover.

1950

June 3	Golden Gate Mile	1	128	1:33 1/4	14,550
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1951

July 4	American Handicap	1 1/4	123	1:48 3/4	33,000
July 14	Hollywood Gold Cup	1 1/4	120	2:01	100,000

## AUTO RACING

**T**HE FIRST automobiles on the road were erratic in action and driving them or even riding in them was considered a trifle risky, hence it became the sporting thing to do. Experimental excursions in crude cars gave rise to rivalry in speed over the rough roads of the Gay Nineties and this eventually led to formal contests, the first of which was a road race from Paris to Rouen in 1894, with 26 cars showing up at the starting line. Formal competition in the United States started with a road race in the Chicago district on Thanksgiving Day, 1895, and the winner, J. F. Duryea, covered the road distance of 54.36 miles at the astonishing average of 7.5 miles per hour!

Around 1900 Paris became the hub of road racing in Europe and each year there were raucous, dusty and dangerous races from Paris to Berlin, to Vienna, to Madrid

and other cities on the Continent. Accidents were so numerous to drivers and spectators that, after a gory group of mishaps in the forepart of the Paris-Madrid race of 1903, the contest was halted at Bordeaux by public authorities and all road racing was brought under control. Other kinds of auto racing were exposed to view. Some contests, including 24-hour races for stock models, were held on circular or oval tracks originally built for horse racing. Finally came the special racing strips for autos, including such famous autodromes as Brooklands in England and the Indianapolis Speedway in the United States.

As a test of engine and chassis under severe conditions and great strain, auto racing rendered invaluable assistance in the development of the motor car of today.

### National A. A. A. Champions

1909 Bert Dingley	1923 Eddie Hearne	1937 Wilbur Shaw
1910 Ray Harroun	1924 Jimmy Murphy	1938 Floyd Roberts
1911 Ralph Mulford	1925 Peter DePaolo	1939 Wilbur Shaw
1912 Ralph DePalma	1926 Harry Hartz	1940 Rex Mays
1913 Earl Cooper	1927 Peter DePaolo	1941 Rex Mays
1914 Ralph DePalma	1928 Louis Meyer	1946 Ted Horn
1915 Earl Cooper	1929 Louis Meyer	1947 Ted Horn
1916 Dario Resta	1930 Billy Arnold	1948 Ted Horn
1917 Earl Cooper	1931 Louis Schneider	1949 John Parsons
1918 Ralph Mulford	1932 Bob Carey	1950 Henry Banks
1919 Howard Wilcox	1933 Louis Meyer	1951 Tony Bettenhausen
1920 Gaston Chevrolet	1934 Bill Cummings	1952 Charles Stevenson
1921 Tommy Milton	1935 Kelly Petillo	1953 Sam Hanks
1922 Jimmy Murphy	1936 Mauri Rose	

### History of the One-Mile Speed Mark

The first recorded effort for one mile was made in 1898 by Chasseloup-Laubat, driving a Jentaud, in France. His average was 39.23 m.p.h. This was increased to 65.79 in 1899 by Jenatzky, also in France. The first man to travel better than 100 m.p.h. was Rigolly, in 1904, at 103.56 m.p.h., followed by Baras, with 104.53 in the same year. The first over 200 m.p.h. was Major H. O. D. Segrave, who drove at 203.790 in 1927 at Daytona, Florida.

In 1947 John Cobb of London became the first person to travel more than 400 m.p.h. on land. The Englishman accomplished the

feat on Sept. 16 at Bonneville, Utah, while raising the world mile record to 394.196 m.p.h. and the world kilometer (.62137 of a mile) mark to 393.825 m.p.h.

Cobb's fastest mile was covered in 8.93 seconds and his average speed was 9.1325 seconds. The Briton drove at the rate of 385.645 m.p.h. for the mile and 388.019 for the kilometer on the southward run, then increased his pace to 403.135 m.p.h. and 399.808, respectively, on the northward sprint, the best times ever recorded.

Those who drove 300 m.p.h. or better follow (all at Bonneville):

Date	Driver	Car	Average
Sept. 3, 1935	Sir Malcolm Campbell	Bluebird Special	301.1292
Nov. 19, 1937	Capt. G. E. T. Eyston	Thunderbolt #1	311.42
Aug. 27, 1938	Capt. G. E. T. Eyston	Thunderbolt #1	345.5
Sept. 15, 1938	John Cobb	Railton	350.2
Sept. 16, 1938	Capt. G. E. T. Eyston	Thunderbolt #1	357.5
Aug. 23, 1939	John Cobb	Railton Red Lion	368.9
Sept. 16, 1947	John Cobb	Railton Mobil Special	394.196

## Indianapolis Speedway Winners

(500-mile race)

Year	Winner	Car	Second	Third	Time	Average m.p.h.
1911	Harroun	Marmon	Mulford	Bruce-Brown	6:42:08	74.59
1912	Dawson	National	Tetzloff	Hughes	6:21:08	78.70
1913	Goux	Peugeot	Wishart	Merz	6:35:05	76.92
1914	Thomas	Delarge	Duray	Guyot	6:03:45	82.47
1915	DePalma	Mercedes	Resta	Anderson	5:33:55	89.84
1916*	Resta	Peugeot	De Aleve	Mulford	3:34:17	83.26
1917-18	No races					
1919	Wilcox	Peugeot	Hearne	Goux	5:40:42	88.06
1920	Chevrolet	Monroe	Thomas	Milton	5:38:32	88.50
1921	Milton	Frontenac	Salles	Ford	5:34:44	89.62
1922	Murphy	Murphy Special	Hartz	Hearne	5:17:30	94.48
1923	Milton	H. G. S. Special	Hartz	Murphy	5:29:50	90.95
1924	Corum-Boyer	Dusenbergs Special	Cooper	Murphy	5:05:23	98.23
1925	DePaolo	Dusenbergs Special	Lewis	Shafer	4:56:39	101.13
1926†	Lockhart	Miller Special	Hartz	Woodbury	4:10:17	95.88
1927	Souders	Dusenbergs	Devore	Gulatta	5:07:33	97.54
1928	Meyer	Miller Special	Moore	Souders	5:01:33	99.48
1929	Keech	Simplex Special	Meyer	Gleason	5:07:25	97.58
1930	Arnold	Hartz-Miller	Cantlon	Schneider	4:58:39	100.488
1931	Schneider	Bowes Special	Frame	Hepburn	5:10:28	96.629
1932	Frame	Miller Special	Wilcox	Bergere	4:48:03.79	104.144
1933	Meyer	Miller Special	Shaw	Moore	4:48:12.75	104.089
1934	Cummings	Miller Special	Rose	Moore	4:46:05.20	104.863
1935	Petillo	Gilmore Special	Shaw	Cummings	4:42:22.71	106.240
1936	Meyer	Ring Free Special	Horn	Mackenzie	4:35:03.39	109.069
1937	Shaw	Shaw-Gilmore Special	Hepburn	Horn	4:24:07.80	113.580
1938	Roberts	Burd Piston Reg. Special	Shaw	Miller	4:15:58.40	117.200
1939	Shaw	Boyle Special	Snyder	Bergere	4:20:47.39	115.035
1940	Shaw	Boyle Special	Mays	Rose	4:22:31.17	114.277
1941	Rose-Davis†	Noc-Out Hose Clamp Special	Mays	Horn	4:20:36.24	115.117
1942-45	No races					
1946	Robson	Thorne Eng. Special	Jackson	Horn	4:21:16.71	114.820
1947	Rose	Blue Crown Special	Holland	Horn	4:17:52.17	116.338
1948	Rose	Blue Crown Special	Holland	Nalon	4:10:23.38	119.813
1949	Holland	Blue Crown Special	Parsons	Connor	4:07:15.97	121.327
1950§	Parsons	Wynn's Fiction Proof Spl.	Holland	Rose	2:46:55.97	124.002
1951	Wallard	Belanger Special	Nazaruk	McGrath-Ayulo	3:57:38.05	126.244
1952	Rutkman	Agajanian Special	Rathmann	Hanks	3:52:41.88	128.922
1953	Kovovich	Fuel Injection Spl.	Cross	Hanks-Carter	3:53:01.69	128.740

\* 300 miles. † Race ended at 400 miles owing to heavy rain. ‡ Davis drove 180 miles, Rose 320. § 1950 race ended at 345 miles because of rain.

## Ascari Captures Auto Test

Alberto Ascari of Italy, world auto racing champion in 1953, piloted his Red Lancia to victory in the 1954 Mille Miglia 1,000-mile race at Brescia, Italy. Ascari's time for the event, called "The Race of 7,000 Curves," was 11 hours 26 minutes 10 seconds. One driver, Andre Bouchon of France, was killed, twelve drivers were injured and thirteen spectators were hurt during the contest.

## Yale Swimmers Stretch String

Yale's swimming team, coached by Robert J. H. Kiphuth, extended its dual-meet winning streak to 113 by defeating Harvard, 59-25, in the 1953-54 finale. The Elis' current skein started after a defeat by Army in 1945. Kiphuth led Yale through 175 meets without a setback, a record, from 1924 to March 13, 1937, Harvard snapping the row of victories.

## Notre Dame Football Leader

An Associated Press compilation in 1954 revealed that Notre Dame, with a percentage of .833, had the best college football record from 1929 through 1953. The statistics (records include post-season games) follow:

	W.	L.	T.	Pct.	Points For	Agst.
Notre Dame	184	37	15	.833	5,134	1,914
Tennessee	190	44	13	.812	5,405	1,645
Alabama	180	50	12	.783	5,798	2,094
Army	165	56	16	.747	5,884	1,998
Michigan State	146	51	15	.741	4,604	2,028
Duke	166	60	12	.735	4,842	1,927
Michigan	153	59	9	.722	4,110	1,999
Oklahoma	157	67	21	.701	4,866	2,305
Ohio State	139	61	14	.695	4,401	2,144
So. California	164	73	21	.691	5,132	2,527
Holy Cross	153	74	15	.674	4,388	2,139
Tulsa	154	75	15	.673	5,198	2,734
Texas	161	79	11	.671	4,697	2,386
Fordham	115	87	14	.668	3,622	2,070
Villanova	141	71	11	.665	3,970	2,245
Minnesota	133	69	12	.658	4,017	2,459
Georgia	163	85	14	.657	5,183	2,987
Boston College	125	67	15	.651	3,893	2,741
Detroit	137	74	7	.649	4,135	2,205
Louisiana State	149	84	13	.639	4,734	2,723
California	157	89	11	.634	4,243	2,597
Pennsylvania	124	72	12	.633	4,013	2,311
Tulane	143	83	12	.633	4,520	2,951



## 1954 CHAMPIONS AND RECORDS



# ICE HOCKEY National League

## Stanley Cup Play-offs

## SERIES C—FINAL

*April 4—Detroit 3, Montreal 1
*April 6—Montreal 3, Detroit 1
April 8—Detroit 5, Montreal 2
April 10—Detroit 2, Montreal 0
*April 11—Montreal 1, Detroit 0†
April 13—Montreal 4, Detroit 1
*April 16—Detroit 2, Montreal 1†

\* At Detroit. † Overtime.

## FINAL STANDING OF THE CLUBS

	W.	L.	Pts.	Goals	
				For	Agst.
Detroit.....	4	3	8	14	12
Montreal.....	3	4	6	12	14

## SERIES A—SEMIFINAL

*March 23—Detroit 5, Toronto 0
*March 25—Toronto 3, Detroit 1
March 27—Detroit 3, Toronto 1
March 30—Detroit 2, Toronto 1
*April 1—Detroit 4, Toronto 3†

\* At Detroit. † Overtime.

## FINAL STANDING OF THE CLUBS

	W.	L.	Pts.	Goals	
				For	Agst.
Detroit.....	4	1	8	15	8
Toronto.....	1	4	2	8	15

## SERIES B—SEMIFINAL

*March 23—Montreal 2, Boston 0
*March 25—Montreal 8, Boston 1
March 27—Montreal 4, Boston 3
March 30—Montreal 2, Boston 0

\* At Montreal.

## FINAL STANDING OF THE CLUBS

	W.	L.	Pts.	Goals	
				For	Agst.
Montreal.....	4	0	8	16	4
Boston.....	0	4	0	4	16

## Final 1953-54 Standing of the Clubs

(Regular season)

	W.	L.	T.	Pts.	Goals	
					For	Agst.
Detroit Red Wings.....	37	19	14	88	191	132
Montreal Canadiens.....	35	24	11	81	195	141
Toronto Maple Leafs....	32	24	14	78	152	131
Boston Bruins.....	32	28	10	74	177	181
New York Rangers.....	29	31	10	68	161	182
Chicago Black Hawks....	12	51	7	31	133	242

## LEADING 1953-54 SCORERS

## Stanley Cup Play-offs

	Gms.	Gls.	As.	Pts.	PIM
Dickie Moore, Montreal..	11	5	8	13	8
Bernie Geoffrion, Mont..	11	6	5	11	18
Jean Beliveau, Montreal	10	2	8	10	4
Gordie Howe, Detroit....	12	4	5	9	7
Alex Delvecchio, Det....	12	2	4	8	14
Ted Lindsay, Detroit.....	12	2	4	8	14
Red Kelly, Detroit.....	12	5	1	6	4
Metro Prystay, Det.....	12	2	3	5	0
Marcel Pronovost, Det...	12	2	3	5	12

## Regular Season

	Gms.	Gls.	As.	Pts.	PIM
Gordie Howe, Detroit....	70	33	48	81	109
Maurice Richard, Mont..	70	37	30	67	112
Ted Lindsay, Detroit....	70	26	36	62	110
Bernie Geoffrion, Mont..	54	29	25	54	87
Bert Olmstead, Mont....	70	15	37	52	85
Red Kelly, Detroit.....	62	16	33	49	18
Earl Reibel, Detroit.....	69	15	33	48	18
Ed Sandford, Boston....	70	16	31	47	42
Fleming Mackell, Bost..	67	15	32	47	60
Ken Mosdell, Montreal..	67	22	24	46	64
Paul Ronty, New York....	70	13	33	46	18
Don Raleigh, New York..	70	15	30	45	16
Wally Hergesheimer, N. Y.	66	27	16	43	42
Tod Sloan, Toronto.....	67	11	32	43	100
Larry Wilson, Chicago...	66	9	33	42	22
Bill Gadsby, Chicago....	70	12	29	41	108
Johnny Peirson, Bost..	68	21	19	40	55
Dave Creighton, Bost..	69	20	20	40	27
Camille Henry, N. Y....	66	24	15	39	10
Sid Smith, Toronto.....	70	22	16	38	28
Ted Kennedy, Toronto...	67	15	23	38	78
Joe Klukay, Boston.....	70	20	17	37	27
Doug Harvey, Montreal..	68	8	29	37	110
Nick Mickoski, N. Y....	68	19	16	35	22
Leo Labine, Boston.....	68	16	19	35	57

## 1953-54 ALL-STAR SELECTIONS

## First Team

## Second Team

G.....	Harry Lumley, Toronto	Sawchuk, Detroit
D.....	Red Kelly, Detroit	Gadsby, Chicago
C.....	Doug Harvey, Montreal	Horton, Toronto
C.....	Ken Mosdell, Montreal	Kennedy, Toronto
R. W.....	Gordie Howe, Detroit	Richard, Montreal
L. W.....	Ted Lindsay, Detroit	Sandford, Boston

## 1953-54 TROPHY WINNERS

Hart (most valuable player)—Al Rollins, Chicago  
 Ross (leading scorer)—Gordie Howe, Detroit  
 Lady Byng (sportsmanship)—Red Kelly  
 Calder (top rookie)—Camille Henry, New York  
 Vezina (leading goalie)—Harry Lumley, Toronto  
 Norris (best defenseman)—Red Kelly

## American League

## Final 1953-54 Standing of the Clubs

(Regular season)

	W.	L.	T.	Pts.	Goals	
					For	Agst.
Buffalo Bisons.....	39	24	7	85	283	217
Hershey Bears.....	37	29	4	78	274	243
*Cleveland Barons....	38	32	0	76	269	227
Pittsburgh Hornets....	34	31	5	73	250	222
Providence Reds.....	26	40	4	56	211	276
Syracuse Warriors.....	24	42	4	52	215	317

\* Won play-offs.

## Leading Scorers

(Regular season)

	Gms.	Gls.	As.	Pts.	PIM
George Sullivan, Hershey	69	30	89	119	54
Jackie Gordon, Cleveland	70	31	71	102	20
Don Marshall, Buffalo...	70	39	57	96	8
Gaye Stewart, Buffalo...	70	42	53	95	38
Eddie Olson, Cleveland..	70	40	54	94	50
Lorne Ferguson, Hershey	70	45	42	87	34
Danny Lewicki, Pittsburgh	60	36	45	81	19
Arnie Kullman, Hershey..	69	40	41	81	35
Dunc Fisher, Hershey....	69	41	39	80	24
Ed Slowinski, Buffalo...	67	38	41	79	16

## Calgary Takes Canadian Title

The Calgary Stampede beat the Quebec Aces, 5 games to 1, in 1954 to become the first winners of the Edinburgh Trophy, emblematic of the professional ice hockey championship of Canada.

## ICE HOCKEY (contd.)

## Western League

## Final 1953-54 Standing of the Clubs

(Regular season)

	W.	L.	T.	Pts.	Goals	For	Agst.
Vancouver Canucks....	39	24	7	85	218	174	
*Calgary Stampeders....	38	25	7	83	266	206	
Saskatoon Quakers....	32	29	9	73	226	214	
Edmonton Flyers....	29	30	11	69	246	260	
Victoria Cougars....	27	32	11	65	203	223	
New Westminster Royals	28	34	8	64	218	261	
Seattle Bombers....	22	41	7	51	209	248	

\* Won play-offs.

## Leading Scorers

(Regular season)

	Gms.	Gls.	As.	Pts.	PIM
Guyle Fielder, Seattle....	68	24	64	88	20
Wayne Brown, Seattle....	70	49	32	81	24
Eddie Dorohoy, Victoria....	70	26	53	79	46
Alex Kaleta, Saskatoon....	70	19	53	72	52
Jack McLeod, Saskatoon....	69	33	38	71	46
Pat Lundy, Calgary....	66	29	42	71	18
Ray Manson, Saskatoon....	70	28	42	70	22
Gordie Fashoway, New West	70	43	26	69	35
Bobby Love, New West....	70	23	46	69	22
Larry Popein, Vancouver....	70	34	32	66	22
Frank Ashworth, Calgary	67	24	42	66	28

## Quebec League

## Final 1953-54 Standing of the Clubs

	W.	L.	T.	Pts.	Goals	For	Agst.
Chicoutimi Saguenens....	40	25	7	87	261	197	
Montreal Royals....	40	25	7	87	257	203	
Ottawa Senators....	34	32	6	74	223	212	
*Quebec Aces....	30	34	8	68	216	212	
Sherbrooke Saints....	30	36	6	66	223	244	
Valleyfield Braves....	31	38	3	65	207	252	
Springfield Rifles....	25	40	7	57	222	289	

\* Won play-offs.

## Leading Scorers

(Regular season)

	Gms.	Gls.	As.	Pts.	PIM
Rip Riopelle, Ottawa....	72	31	60	91	46
Skip Burchell, Montreal....	66	31	59	90	34
Andre Corriveau, Valleyfield	69	37	51	88	8
Leo Gravelle, Ottawa....	68	45	41	86	6
Ray Powell, Quebec....	68	22	55	77	10
Jim Moore, Chicoutimi....	71	28	47	75	79
Chuck Blair, Ottawa....	71	28	43	71	0
Ed Litzenberger, Montreal	67	31	39	70	44
Alex Irving, Sherbrooke....	72	25	39	64	36
Bucky Buchanan, Chic'timi	63	29	34	63	18

## TRAPSHOOTING

## Grand American Championships

(At Vandalla, Ohio, Aug. 20-28)

## GRAND AMERICAN HANDICAP

Men—Nick Egan, New York (19 yd.)....	99 x 100
Women—Dianne Williamson, Compton, Calif. (22 yd.)....	95 x 100
Junior—Tommy Fisher, Findlay, Ohio....	96 x 100
Professional—Herb Parsons, Somerville, Tenn.....	92 x 100

## PRELIMINARY HANDICAP

Men—Vernon Thornborrow, Hamilton, Ont. (18 yd.)....	100 x 100
Women—Mrs. Helen Ryan, Maysville, Ky. (19 yd.)....	96 x 100
Junior—John Zehmer, New York....	97 x 100
Professional—A. L. Adkins, Louisville....	96 x 100

## HIGH-OVER-ALL

Men—Arnold Riegger, Seattle....	975 x 1000
Women—Iva Penbridge, Phillipsburg, Kan.....	946 x 1000
Junior—Nick Egan....	949 x 1000
Professional—Cliff Doughman, Morrow, Ohio.....	959 x 1000

## NORTH AMERICAN CLAY TARGET

Men—Julius Petty, Stuttgart, Ark....	200 x 200
Women—Helen Watkins, Wasco, Ore....	194 x 200
Junior—Lawrence Jones, Condon, Ore....	198 x 200
Sub-junior—Nick Egan....	195 x 200
Professional—Cliff Doughman....	199 x 200

## Amateur Ice Hockey

## International League

## FINAL 1953-54 STANDING OF THE CLUBS

(Regular season)

	W.	L.	T.	Pts.	Goals	For	Agst.
*Cincinnati....	47	15	2	96	325	153	
Marion....	40	24	0	80	279	207	
Johnstown....	35	27	3	73	254	221	
Toledo....	33	26	5	71	221	157	
Troy (Ohio)....	31	32	1	63	241	258	
Fort Wayne....	29	30	5	63	203	220	
Grand Rapids....	29	32	3	61	252	274	
Louisville....	18	42	4	40	202	331	
Milwaukee....	13	48	3	29	187	343	

\* Won play-offs.

## 1954 World Championship

## FINAL STANDING OF THE TEAMS

	W.	L.	T.	Pts.	Goals	For	Agst.
Russia....	6	0	1	13	37	10	
Canada....	6	1	0	12	59	12	
Sweden....	5	1	1	11	30	13	
Czechoslovakia....	4	3	0	8	41	21	
Germany....	2	4	1	5	22	32	
Finland....	1	5	1	3	12	52	
Norway....	1	6	0	2	6	43	
Switzerland....	0	5	2	2	15	34	

## OTHER CHAMPIONS, 1954

## Canada

Edinburgh Trophy (professional championship of Canada)—Calgary Stampeders  
 Allan Cup (senior amateur)—Penticton (B.C.) V's  
 Memorial Cup (junior amateur)—St. Catharines Teepees  
 Intercollegiate—Laval University

## United States

National Amateur (senior)—Great Falls (Mont.) Americans  
 National Amateur (junior)—Cambridge (Mass.) Cusick Club  
 National Collegiate—Rensselaer Polytechnic Inst.  
 Pentagonal League—Harvard

## BOBSLEDDING

## World Championships

(At Cortina d'Ampezzo, Italy, Jan. 30-31)

Two-man—Italy No. 2 (Guglielmo Scheibmeier-Andre Zambelli). Heat times—1:27.52, 1:29.34, 1:25.17, 1:25.05. Total time—5 minutes 47.08 seconds.  
 Four-man—Switzerland No. 1 (Fritz Feierabend, driver; Dinero; Warburton; Angst, brake). Heat times—1:18.94, 1:18.07, 1:20.27, 1:18.66. Total time—5:15.94.

## North American

(At Lake Placid, N. Y., Feb. 20)

Two-man—Sno Birds of Lake Placid Club (Stan Benham-James Bickford). Heat times—1:19.40, 1:19.50, 1:17.97, 1:17.92. Total time—5:14.79.  
 Four-man—Not held.

## National A. A. U.

Two-man—Sno Birds of Lake Placid Club (Stan Benham-James Bickford). Heat times—1:19.56, 1:16.64, 1:17.60, 1:17.81. Total time—5:11.61.  
 Four-man—Sno Birds of Lake Placid Club (Stan Benham, driver; Pat Martin, John B. Wells; John Helmer, brake). Heat times—1:14.14, 1:13.27, 1:13.08, 1:13.02. Total time—4:53.51.

## Adirondack A. A. U.

Two-man—Sno Birds of Lake Placid Club (Stan Benham-James Bickford). Heat times—1:18.14, 1:17.65, 1:17.81, 1:18.03. Total time—5:11.63.  
 Four-man—Ausable Forks B. C. (Joe Meconi, driver; Al Soulier; Don Burrell; Franklyn Beattie, brake). Heat times—1:14.09, 1:13.84, 1:13.22, 1:12.38. Total time—4:53.53.

## ICE (SPEED) SKATING

## Championships

## World—Men

(At Sapporo, Japan, Jan. 16-17)

All-around—Boris Schilkov, U.S.S.R.	197.463 pts.
500 meters—Eugenij Grischin, U.S.S.R.	0:44.1
1,500 meters—Boris Schilkov	2:22.3
5,000 meters—Oleg Goncharenko, U.S.S.R.	8:21.9
10,000 meters—Oleg Goncharenko	17:38.7

## World—Women

(At Ostersund, Sweden, Feb. 20-21)

All-around—Lidia Selikova, U.S.S.R.	209.883 pts.
500 meters—Sofia Kondakova, U.S.S.R.	0:47.6
1,000 meters—Sofia Kondakova	1:40.2
3,000 meters—Rimma Zhukova, U.S.S.R.	5:26.3
5,000 meters—Evi Huttenen, Finland	9:20.2

## European

All-around—Boris Schilkov, U.S.S.R.	189.058 pts.
500 meters—Eugenij Grischin, U.S.S.R.	0:42.3
1,500 meters—Boris Schilkov	2:13.3
5,000 meters—Hjalmar Andersen, Norway	8:12.9
10,000 meters—Hjalmar Andersen	16:55.2

## North American Outdoor

(At Pittsfield, Mass., Feb. 6-7)

220 yd.—Jim Lynch, Newburgh, N. Y.	0:19.4
440 yd.—Don McDermott, Grossinger, N. Y.	0:38.0
880 yd.—Art Longsjö, Leominster, Mass.	1:29.8
3/4-mile—Art Longsjö	2:09.4
1 mile—Art Longsjö	2:58.9
5 miles—Edgar Dame, Revere, Mass.	14:55.5
Champion—Art Longsjö	130 pts.

## WOMEN

220 yd.—Pat Gibson, Madison, Wis.	0:21.3
40 yd.—Mrs. Barbara Marchetti DeSchepper, Detroit	0:41.3
880 yd.—Pat Gibson	1:40.4
3/4-mile—Pat Gibson	2:31.9
1 mile—Mrs. Barbara M. DeSchepper	2:37.6
Champion—Mrs. Barbara M. DeSchepper	120 pts.

## BADMINTON

## All-England Championships

(At London, March 17-20)

Singles—Eddy Choong, Malaya	
Women's singles—Judith Devlin, United States	
Doubles—Ooi Teik Hock-Ong Poh Lim, Malaya	
Women's doubles—Judith and Susan Devlin, U. S.	
Mixed doubles—J. R. Best-Iris Cooley, England	

## United States

(At Lewiston, N. Y., April 7-11)

Singles—Eddy Choong, Malaya	
Women's singles—Judith Devlin, Baltimore	
Doubles—Ooi Teik Hock-Ong Poh Lim, Malaya	
Women's doubles—Judith and Susan Devlin, Baltimore	
Mixed doubles—Joseph and Lois Alston, South Pasadena, Calif.	
Veterans' doubles—Wayne Schell—ob Wright, Boston	

## JUNIOR (CLOSED)

(At Orange, N. J., April 15-17)

Boys' singles—John Kevorkian, Jr., Watertown, Mass.	
Girls' singles—Judith Devlin, Baltimore	
Boys' doubles—Richard Ball, Baltimore—John Kevorkian, Jr.	
Girls' doubles—Rosine Capehart, New York—Sally Thomas, Mountain Lakes, N. J.	
Mixed doubles—Linda Cobb, Weston, Mass.—John Kevorkian, Jr.	

## North American Indoor

(At Lake Placid, N. Y., March 6-7)

440 yd.—Jim Campbell, Chicago	0:42.6
880 yd.—Art Longsjö, Leominster, Mass.	1:25.2
3/4-mile—Art Longsjö	2:07.1
1 mile—Art Longsjö	2:55.1
2 miles—Art Longsjö	6:23.3
5 miles—Art Longsjö	*16:53.4
Champion—Art Longsjö	155 pts.

\* Record.

## WOMEN

440 yd.—Mrs. Barbara Marchetti DeSchepper, Detroit	0:45.5
880 yd.—Mrs. Barbara M. DeSchepper	1:35.7
3/4-mile—Mrs. Barbara M. DeSchepper	2:29.5
1 mile—Mrs. Barbara M. DeSchepper	3:21.8
Champion—Mrs. Barbara M. DeSchepper	150 pts.

## United States Outdoor

(At St. Paul, Minn., Jan. 30-31)

220 yd.—William Carow, West Allis, Wis.	0:18.4
440 yd.—Gene Sandvig, Minneapolis	0:36.5
880 yd.—Ken Bartholomew, Minneapolis	1:28.1
3/4-mile—Gene Sandvig	2:41.5
1 mile—Ken Bartholomew	3:17.7
2 miles—Art Longsjö, Leominster, Mass.	6:30.6
5 miles—Art Longsjö	15:43.5
Champion—Ken Bartholomew	100 pts.

## WOMEN

220 yd.—Pat Gibson, Madison, Wis.	0:20.4
440 yd.—Pat Gibson	0:41.2
880 yd.—Pat Gibson	1:33.7
3/4-mile—Pat Gibson	2:22.0
1 mile—Pat Gibson	3:21.9
Champion—Pat Gibson	150 pts.

## United States Indoor

(At Champaign, Ill., Feb. 13-14)

440 yd.—Bob Olson, Glendale, Calif.	0:37.7
880 yd.—Bob Olson	1:26.2
3/4-mile—Bob Olson	2:16.7
1 mile—Jim Campbell, Chicago	2:48.0
2 miles—Bob Olson	6:29.3
5 miles—Dick Hunt, Los Angeles	17:01.4
Champion—Bob Olson	150 pts.

## WOMEN

440 yd.—Mrs. Barbara Marchetti DeSchepper, Detroit	0:42.0
880 yd.—Mrs. Barbara M. DeSchepper	1:26.7
3/4-mile—Mrs. Barbara M. DeSchepper	2:18.9
1 mile—Mrs. Barbara M. DeSchepper	*3:10.7
Champion—Mrs. Barbara M. DeSchepper	120 pts.

\* Record.

## HANDBALL

## U. S. H. A. 4-Wall Championships

(At Chicago and Evanston, Ill., March 20-27)

Singles—Vic Hershkovitz, Brooklyn Central Y.M.C.A.	
Doubles—Sam Haber—Ken Schneider, Chicago Town Club	
Masters' doubles—Bart Hackney—George Brotemarkle, Los Angeles A. C.	
Team—Detroit No. 1, Chicago and St. Louis (tie)	

## INTERCOLLEGIATE

No. 1 singles—Don Varner, U. of Illinois at Navy Pier	
No. 2 singles—Don Del Papa, Detroit	
Doubles—Jerry Lask—Joseph Barrett, Illinois Navy Pier	
Team—Illinois Navy Pier and Detroit (tie)	

## Amateur Athletic Union

## FOUR-WALL

Singles—Bill Lauro, Brooklyn Central Y.M.C.A.	
Doubles—John Abate—Joe Ingrassia, New York A. C.	

## ONE-WALL (OUTDOORS)

Singles—Rubrecht Obert, New York	
Doubles—Ted Russell—Adrian Lightys, Hebrew Educational Society, Astoria, New York	

## Y. M. C. A.

Singles—Gus Lewis, Division St. Dept., Chicago	
Doubles—Jack Gordon—John Sloan, Irving Park, Chicago	



## GYMNASTICS

## World Championships

(At Rome, Italy, June 28-July 1)

Points

All-around—Valent Mouratov, Russia, and Victor Tchoukarine, Russia (tie).....	115.45
Free exercise—Masao Takemoto, Japan.....	19.52
Horizontal bar—Valent Mouratov.....	19.70
Long horse—Leo Sotornik, Czechoslovakia.....	19.25
Parallel bars—Viktor Tchoukarine.....	19.60
Rings—Albert Azarine, Russia.....	19.70
Side horse—Grant Chaguiniane, Russia.....	19.30
Team—Russia.....	688

## WOMEN

All-around—Galina Roudiko, Russia.....	75.68
Balance beam—Keino Tanaka, Japan.....	18.89
Free exercise—Tamara Manina, Russia.....	19.30
Parallel bars—Agnes Keleti, Hungary.....	19.46
Side-horse vault—Tamara Manina.....	18.96
Team drill—Hungary.....	73.80
Team—Russia.....	524.31

## National A. A. U. Championships

(At San Fernando, Calif., April 30-May 1)

All-around—Charles Simms, Los Angeles Turners.....	315.7
Free exercise—Don Faber, U.C.L.A.....	57.5
Horizontal bar—Jean Cronstedt, Penn State.....	57.3
Long horse—Charles Simms.....	54.2
Parallel bars—Jean Cronstedt.....	57.6
Still rings—Leonard Harris, Los Angeles City College.....	56.3
Rope climb—Don Perry, U.C.L.A.....	3 sec.
Side horse—Robert Diamond, U.C.L.A.....	56.6
Swinging rings—Mark Gilden, Los Angeles.....	28.2
Trampoline—Robert Elliot, Maverick Boys' Club, Amarillo, Texas.....	27.3
Tumbling—Richard Browning, Champaign, Ill.....	29.0
Team—Los Angeles Turners.....	37½

## WOMEN

(At New York Turn Verein, June 4)

All-around—Ruth Grukowski, Lincoln Turners, Chicago.....	219.2
Balance beam—Ruth Grukowski.....	55.3
Free calisthenics—Ernestine Russell, Windsor (Ont.) Gymnastic Club.....	57.5
Parallel bars—Louise Wright, Roxborough Turners, Philadelphia, and Ruth Grukowski (tie).....	54.4
Side horse—Louise Wright.....	54.4
Swinging rings—Louise Wright.....	52.6
Tumbling—Barbara Galleher, Dallas A. C.....	28.5
Team drill—American Sokol, Eastern District (N. J.).....	154.0

## National Collegiate

(At Champaign, Ill., April 2-3)

All-around—Jean Cronstedt, Penn State.....	1,557
Flying rings—Manuel Procopio, Penn State.....	277
Free exercise—Jean Cronstedt.....	282
Horizontal bar—Jean Cronstedt.....	284
Parallel bars—Jean Cronstedt.....	280
Rope climb—Don Perry, U.C.L.A.....	2.8s.
Side horse—Robert Lawrence, Penn State.....	284
Trampoline—James Norman, Iowa.....	268
Tumbling—Richard Browning, Illinois.....	278
Team—Penn State.....	137

## Eastern Intercollegiate League

(At Philadelphia, March 13)

All-around—Manuel Procopio, Penn State.....	976
Flying rings—Fordinand Fourmies, Syracuse.....	270
Free exercise—Jean Cronstedt, Penn State.....	281
Horizontal bar—Jean Cronstedt.....	285
Long horse—Milan Trnka, Syracuse.....	275
Olympic all-around—Jean Cronstedt.....	1,609
Parallel bars—Jean Cronstedt.....	279
Rope climb—Eugene Scholl, Temple.....	3.5s.
Side horse—Frank Wick, Penn State.....	282
Still rings—Robert McCarthy, Temple.....	266
Tumbling—James Sebbo, Syracuse.....	278

## CURLING

The United States 84-man team defeated Canada, 472 to 436, in the 1954 matches for the Gordon International Medal at The Country Club, Brookline, Mass., and the Winchester (Mass.) C. C. on March 5 and 6. The victory was the twentieth for the U. S. in the competition. Canada has won the event 39 times.

## OTHER 1953-54 WINNERS

(Skips in parentheses)

Women's U.S. Championship—Wauwatosa (Wis.) Granites (Mrs. Erwin Nell)

Midwest Championship—Portage, Wis. (Bruce Rogers)

Northwest Championship—Duluth, Minn. (Bob Magie)

## DETROIT BONSPIEL

Grand Aggregate—London, Ont. (Jack Nash)

## MANITOBA BONSPIEL (AT WINNIPEG)

Grand Aggregate—Winnipeg Granites (Howard Wood, Jr.)

British Consols Trophy—Deer Lodge C. C., Winnipeg (Jimmie Welsh)

## QUEBEC INTERNATIONAL BONSPIEL

Seagram's Grand Aggregate—Kirkland Lake, Ont. (C. A. Sutherland)

International Championship—Montreal West, Quebec (E. L. Gallagher)

Chateau International Trophy—Kirkland Lake (C. A. Sutherland)

Omega International Trophy—St. Johns, Quebec (J. A. Ross)

## 1954 Canadian Championship

(At Edmonton, Alberta)

## FINAL STANDING OF THE RINKS

	W.	L.		W.	L.
*Alberta.....	9	1	New Brunswick..	4	6
Saskatchewan..	8	2	Manitoba.....	4	6
Ontario.....	6	4	Quebec.....	3	7
Nova Scotia.....	6	4	Prince Ed. Island	3	7
Northern Ontario	6	4	Newfoundland...	0	10
British Columbia	6	4			

\*Edmonton Granites (Matt Baldwin, skip; Glenn Gray, Pete Perry, Jimmy Collins).

## VOLLEYBALL CHAMPIONS

Source: Harold T. Friermood, President, United States Volleyball Association.

## U. S. Volleyball Association

(At Tucson, Ariz., May 12-15)

Open—Stockton (Calif.) Y.M.C.A.

Y.M.C.A. Senior—Stockton, Calif.

Intercollegiate—U.C.L.A.

Armed Forces—Hamilton (Calif.) Air Force Base

Y.M.C.A. Veterans' Open—Long Beach, Calif.

Women—Houston Houstonettes

## OTHER CHAMPIONS

American Turners National (men)—Detroit Turners

American Turners National (women)—Indianapolis Atheneum

National Jewish Welfare Board (men)—Lynn (Mass.) Jewish Community Center

NOTE—The Amateur Athletic Union of the United States did not hold championships in 1954.

## WATER POLO

## A. A. U. Champions

Senior outdoor—New York A. C. "A" team

Senior indoor—Illinois A. C., Chicago, "A" team

Junior indoor—New York A. C. "A" team

## WRESTLING

## World Champions

## FREE-STYLE

Flyweight—Hoseyin Abkas, Turkey  
 Bantamweight—Mustafa Dagistanli, Turkey  
 Featherweight—Shozo Sasahara, Japan  
 Lightweight—Tofighe, Iran  
 Welterweight—V. Baloyadze, U.S.S.R.  
 Middleweight—Zandi, Iran  
 Light heavyweight—A. Englas, U.S.S.R.  
 Heavyweight—A. Mekokichvili, U.S.S.R.  
 Team—Turkey

## United States Champions

## FREE-STYLE

114.5 lb.—Richard Delgado, San Diego, Calif.  
 125.5 lb.—Jack Blubaugh, Tulsa, Okla.  
 136.5 lb.—Shozo Sasahara, Tokyo, Japan  
 157.5 lb.—Tommy Evans, Tulsa, Okla.  
 160.5 lb.—Jay Holt, San Francisco  
 174 lb.—Dan Allen Hodge, Tulsa, Okla.  
 191 lb.—Dale Thomas, unattached, Michigan State  
 Heavyweight—Bill Kerslake, Cleveland  
 Team—Tulsa Y.M.C.A. (18 pts.)

## GRECO-ROMAN

114.5 lb.—Richard Delgado  
 125.5 lb.—Lee Allen, Portland, Oreg.  
 136.5 lb.—Safi Taha, Dearborn, Mich.  
 147.5 lb.—Norman Gill, unattached, Michigan State  
 160.5 lb.—Jay Holt, San Francisco  
 174 lb.—James Connor, San Francisco  
 191 lb.—Dale Thomas  
 Heavyweight—Bill Kerslake

## National Collegiate

115 lb.—Hugh Peery, Pittsburgh  
 123 lb.—Richard Govig, Iowa  
 130 lb.—Norvard Nalan, Michigan  
 137 lb.—Myron Roderick, Oklahoma A & M.  
 147 lb.—Tommy Evans, Oklahoma  
 157 lb.—Bob Hoke, Michigan State  
 167 lb.—Joe Solomon, Pittsburgh  
 177 lb.—Ned Blass, Oklahoma A. & M.  
 191 lb.—Peter Blair, Navy  
 Heavyweight—Gene Nicks, Oklahoma A. & M.  
 Team—Oklahoma A. & M. (32 pts.)

## Eastern Intercollegiate

123 lb.—Hugh Peery, Pittsburgh  
 130 lb.—Richard Lemyre, Penn State  
 137 lb.—Gerald Maurey, Penn State  
 147 lb.—Charles Uram, Pittsburgh  
 157 lb.—Edwin Rooney, Syracuse  
 167 lb.—Joe Gattasso, Navy  
 177 lb.—George Beresford, Pittsburgh  
 Heavyweight—Peter Blair, Navy  
 Team—Pittsburgh (37 pts.)

## Francis Sets Scoring Mark

Clarence (Bevo) Francis of Rio Grande (Ohio) College set a recognized intercollegiate scoring record when he made 113 points against Hillsdale's basketball team on Feb. 2, 1954. Francis, who turned professional at the end of the season, notched 116 points in a game with Ashland Junior College during the 1952-53 season, but that mark was not approved by the National Collegiate A. A.

## FENCING

Source: Amateur Fencers League of America.

## World Championships

(At Luxembourg)

Foil—Christian d'Orliola, France  
 Epee—Eduardo Mangiarotti, Italy  
 Saber—Karpati, Hungary  
 Women's foil—Karen Lachmann, Denmark

## TEAM

Foil—Italy  
 Epee—Italy  
 Saber—Hungary  
 Women—Hungary

## United States

(At New York, June 11-18)

Foil—Joseph L. Lewis, Boston (Fencers Club, New York)  
 Epee—Sewell Shurtz, Los Angeles (Faulkner School of Fencing)  
 Saber—George Worth, New York (Salle Santelli)  
 Women's foil—Mrs. Maxine Mitchell, Los Angeles (Hollywood A. C.)

## TEAM

Foil—Salle Santelli, New York  
 Epee—Fencers Club, New York  
 Saber—Salle Santelli  
 Three-weapon—Salle Santelli  
 Women's foil—Salle Santelli

## National Collegiate

(At Chicago, March 26-27)

Foil—Robert Goldman, Pennsylvania  
 Epee—Henry Kolowrat, Princeton  
 Saber—Steve Sobel, Columbia  
 Three-weapon team—Columbia and N. Y. U. (tie)

## Intercollegiate Association

(At New York, March 12-13)

Foil—Phil Mocquard, Cornell  
 Epee—Richard Pew, Cornell  
 Saber—Steve Sobel, Columbia

## TEAM

Foil—Columbia and Cornell (tie)  
 Epee—Columbia  
 Saber—Columbia  
 Three-weapon—Columbia

## Women's Intercollegiate

(At Elmira, N. Y., April 10)

Individual—Sandra Whitehead, Elmira  
 Team—Elmira

## 1954 U. S. Rankings

FOIL—1, Joseph Lewis; 2, Albert Axelrod; 3, Dr. Daniel Bukantz; 4, Allan Kwartler; 5, James Strauch; 6, Arthur Spingarn; 7, Nathaniel Lubell; 8, Harold Goldsmith; 9, Neil Lazar; 10, Charles Steinhart  
 EPEE—1, Sewall Shurtz; 2, Alfred Skrobisch; 3, Peter Conomikes; 4, Richard Berry; 5, Ken Holtsman; 6, Henry Kolowrat; 7, Donald Thompson; 8, Edward Vebell; 9, Jose de Capriles; 10, James Gosline  
 SABER—1, George Worth; 2, Allan Kwartler; 3, Sol Gorlin; 4, Norman Armitage; 5, Jose de Capriles; 6, Abram Cohen; 7, Richard Dyer; 8, Tibor Nyilas; 9, Nickolas Murray; 10, Robert Blum  
 WOMEN—1, Maxine Mitchell; 2, Grace Accl; 3, Madeline Dalton; 4, Janice Lee Romary; 5, Paula Sweeney; 6, Sally Chambers; 7, Estelle Atkins; 8, Judy Goodrich; 9, Ida Balint; 10, Dolly Funke

## Carter, Mrs. Ladewig Top Bowlers

Don Carter of St. Louis and Mrs. Marion Ladewig of Grand Rapids, Mich., were named "Bowlers of the Year" for 1954 by the Bowling Writers Assn. of America.

## BASKETBALL

## Intercollegiate

## FINAL 1953-54 CONFERENCE STANDINGS

## Eastern League

	W.	L.		W.	L.
*Cornell.....	12	3	Columbia.....	6	8
Princeton.....	11	4	Dartmouth.....	5	9
Pennsylvania.....	10	4	Brown.....	4	10
Yale.....	7	7	Harvard.....	2	12

\* Beat Princeton in title play-off.

## Western

	W.	L.		W.	L.
Indiana.....	12	2	Wisconsin.....	6	8
Iowa.....	11	3	Ohio State.....	5	9
Illinois.....	10	4	Michigan State.....	4	10
Minnesota.....	10	4	Michigan.....	3	11
Northwestern.....	6	8	Purdue.....	3	11

## Southwest

	W.	L.		W.	L.
*Rice.....	9	3	So. Methodist.....	6	6
*Texas.....	9	3	Texas Christian.....	5	7
Arkansas.....	6	6	Texas A. & M.....	1	11
Baylor.....	6	6			

\* Co-champion.

## 1954 ALL-AMERICAN SELECTIONS

(Associated Press poll)

**FIRST TEAM**—Frank Selvy, Furman; Don Schlundt, Indiana; Tom Gola, La Salle; Cliff Hagan, Kentucky; Bob Pettit, Louisiana State.

**SECOND TEAM**—Bevo Francis, Rio Grande; Bob Leonard, Indiana; Frank Ramsey, Kentucky; Dick Ricketts, Duquesne; Tom Marshall, Western Kentucky.

## OTHER CHAMPIONS

## Intercollegiate

National (New York) Invitation—Holy Cross  
 Southeastern Conference—Kentucky  
 Southern Conference—George Washington  
 Atlantic Coast Conference—North Carolina State  
 Mason-Dixon Conference—Mt. St. Mary's  
 Mountain States (Skyline)—Colorado A. & M.  
 Border Conference—Texas Tech.  
 Rocky Mountain Conference—Idaho State  
 Midwest Conference—Carleton and Coe (tie)  
 National Assn. (N.A.I.A.)—St. Benedict's  
 National Junior—Moberly (Mo.)  
 Central A. A.—North Carolina College, Durham (visitation);  
 Union U., Richmond, Va. (tournament)  
 Canadian—Western Ontario and Assumption (tie)

## Amateur Athletic Union

Men—Caterpillar Diesels, Peoria, Ill.  
 Women—Wayland College, Plainview, Tex.

## First Title in 30 Years

Cornell's team won its first Eastern Intercollegiate League basketball title in 30 years by beating Princeton, 46-44, in a play-off game in 1954.

## Pacific Coast

	W.	L.		W.	L.
*So. California.....	8	4	Oregon State.....	11	5
U. C. L. A.....	7	5	Idaho.....	9	7
California.....	6	6	Oregon.....	9	7
Stanford.....	3	9	Washington.....	7	9
			Wash. State.....	4	12

\* Won title play-off.

## Missouri Valley

	W.	L.		W.	L.
Okl. A. & M.....	9	1	St. Louis.....	4	6
Wichita.....	8	2	Houston.....	3	7
Tulsa.....	5	5	Detroit.....	1	9

## Big Seven

	W.	L.		W.	L.
*Colorado.....	10	2	Nebraska.....	5	7
*Kansas.....	10	2	Oklahoma.....	4	8
Missouri.....	6	6	Iowa State.....	2	10
Kansas State.....	5	7			

\* Co-champion.

## 1954 N. C. A. A. FINAL

(At Kansas City, Mo., March 20)

## LA SALLE (92)

	G.	F.	P.
Singley, lf.....	8	7	23
Greenberg, rf.....	2	1	5
Maples.....	2	0	4
Blatcher.....	11	1	23
Gola, c.....	7	5	19
O'Malley, lg.....	5	1	11
Yodsnukis, rg.....	0	0	0
O'Hara.....	2	3	7

Total..... 37 18 92

## BRADLEY (76)

	G.	F.	P.
Petersen, lf.....	4	2	10
Babetch, rf.....	0	0	0
King.....	3	6	12
Gower.....	0	1	1
Estergard, c.....	3	11	17
Carney, lg.....	3	11	17
Utt, rg.....	0	0	0
Kent.....	8	0	16
Riley.....	1	1	3

Total..... 22 32 76

## SCORE BY PERIODS

	19	23	30	20—92
La Salle.....	22	21	14	76
Bradley.....	22	21	14	76

Personal fouls—Singley 4, Greenberg 1, Maples 4, Blatcher 4, Gola 5, O'Malley 4, Yodsnukis 5, O'Hara 1, Petersen 2, King 4, Gower 1, Estergard 1, Carney 4, Utt 1, Kent 2, Riley 1.

Free throws missed—King 1, Gower 1, Estergard 1, Carney 6, Kent 2, Riley 1, Singley 3, Greenberg 1, Blatcher 1, O'Hara 1.

## Professional

Source: Haskell Cohen, Publicity Director, National Basketball Association.

## NATIONAL BASKETBALL ASSOCIATION

## Final 1953-54 Standing of the Clubs

(Regular season)

## EASTERN DIVISION

	Won	Lost	Pct.	Avg. pts. per game
New York Knickerbockers.....	44	28	.611	79.0
Boston Celtics.....	42	30	.583	87.7
Syracuse Nationals.....	42	30	.583	83.5
Philadelphia Warriors.....	29	43	.403	78.2
Baltimore Bullets.....	16	56	.222	78.5

## WESTERN DIVISION

	Won	Lost	Pct.	Avg. pts. per game
Minneapolis Lakers.....	46	26	.639	81.7
Rochester Royals.....	44	28	.611	79.8
Fort Wayne Pistons.....	40	32	.556	77.7
Milwaukee Hawks.....	21	51	.292	70.0



# **Basketball (Contd.)** **TEAM-VS.-TEAM VICTORIES** (Regular season)

	Minneapolis	New York	Rochester	Boston	Syracuse	Fort Wayne	Philadelphia	Milwaukee	Baltimore	Points	
										For	Ags.
Minneapolis . . . . .	—	5	6	5	5	5	6	8	6	5880	5658
New York . . . . .	3	—	7	5	5	5	7	5	7	5688	5697
Rochester . . . . .	5	1	—	4	3	8	7	9	7	5742	5567
Boston . . . . .	3	5	4	—	5	4	6	6	9	6315	6147
Syracuse . . . . .	3	5	5	5	—	6	4	7	7	6013	5660
Fort Wayne . . . . .	5	3	3	4	2	—	6	9	8	5593	5476
Philadelphia . . . . .	2	3	1	4	6	2	—	5	6	5632	5787
Milwaukee . . . . .	3	3	1	2	1	2	3	—	6	5038	5420
Baltimore . . . . .	2	3	1	1	3	0	4	2	—	5638	6127

## **Eastern Division Play-Offs**

Round-robin—1, Syracuse (won 4 games lost 0); 2, Boston (2-2); 3, New York (0-4).  
 Final—Syracuse beat Boston, 2 games to 0.

## **Western Division Play-Offs**

Round-robin—1, Minneapolis (3-0); 2, Rochester (2-1); 3, Fort Wayne (0-4).  
 Final—Minneapolis beat Rochester, 2 games to 1.

## **Championship Series**

\*March 31—Minneapolis 79, Syracuse 68.  
 \*April 3—Syracuse 62, Minneapolis 60.  
 \*April 4—Minneapolis 81, Syracuse 67.  
 \*April 8—Syracuse 80, Minneapolis 69.  
 \*April 10—Minneapolis 84, Syracuse 73.  
 \*April 11—Syracuse 65, Minneapolis 63.  
 \*April 12—Minneapolis 87, Syracuse 80.

\* Played at Minneapolis.

## **FINAL STANDING OF THE CLUBS**

	Won	Lost	Pct.
Minneapolis Lakers . . . . .	4	3	.571
Syracuse Nationals . . . . .	3	4	.429

## **Leading Scorers**

(Regular season)

	Gms.	Gls.	Fls.	Pts.
Neil Johnston, Philadelphia	72	591	577	1759
Bob Cousy, Boston . . . . .	72	436	411	1383
Ed Macauley, Boston . . . . .	71	462	420	1344
George Mikan, Minneapolis	72	441	424	1306
Ray Felix, Baltimore . . . . .	72	410	449	1269
Adolph Schayes, Syracuse . . . . .	72	370	488	1228
Bill Sharman, Boston . . . . .	72	412	331	1155
Larry Foust, Fort Wayne . . . . .	72	376	338	1090
Carl Braun, New York . . . . .	72	354	354	1062
Bob Wanzer, Rochester . . . . .	72	322	314	958
Harry Gallatin, New York . . . . .	72	252	433	949
Arnie Risen, Rochester . . . . .	72	321	307	949
Joe Graboski, Philadelphia . . . . .	71	354	236	944
Paul Seymour, Syracuse . . . . .	71	316	299	931
Bob Davies, Rochester . . . . .	72	288	311	887
Jim Pollard, Minneapolis . . . . .	71	326	179	831
George King, Syracuse . . . . .	72	280	257	817
Max Zaslofsky, Fort Wayne . . . . .	65	278	255	811
Vern Mikkelsen, Minneapolis . . . . .	72	283	221	797
Don Sunderlage, Milwaukee	68	254	252	760

## **Arnold Takes Roque Title**

Bobby Arnold of Los Angeles captured the 1954 championship of the American Roque League, held at Wichita, Kan., from Aug. 16 to 26. The runner-up was Irl Fitzgerald of Wichita and Grady Scarborough of Idalu, Tex., was third. Dr. F. T. Sallee of Wichita was first in the second division.

# **TENNIS**

## **Wimbledon Champions**

**Singles**—Jaroslav Drobny, Egypt  
**Women's singles**—Maureen Connolly, San Diego, Calif.  
**Doubles**—Rex Hartwig-Mervyn Rose, Australia  
**Women's doubles**—Louise Brough, Beverly Hills, Calif., Mrs. Margaret Osborne du Pont, Wilmington, Del.  
**Mixed doubles**—E. Victor Seixas, Jr., Philadelphia-Doris Hart, Coral Gables, Fla.

## **United States**

**Singles**—E. Victor Seixas, Jr.  
**Women's singles**—Doris Hart  
**Doubles**—Tony Trabert, Cincinnati-E. Victor Seixas, Jr.  
**Women's doubles**—Shirley Fry, Akron, Ohio-Doris Hart  
**Mixed doubles**—E. Victor Seixas, Jr.-Doris Hart  
**Junior singles**—Jerry Moss, Modesta, Calif.  
**Junior doubles**—Earl Baumgardner, Oakland, Calif.-Jerry Moss  
**Boys' singles**—Alan Silverman, Brooklyn  
**Boys' doubles**—Earl Buchholz, St. Louis-Ned Neely, Atlanta, Ga.  
**Intercolastic singles**—Gregory Grant, South Pasadena, Calif.  
**Intercolastic doubles**—Jeff Arnold-Bobby Macy, Coral Gables, Fla.  
**Girls' singles (18 and under)**—Barbara Breit, North Hollywood, Calif.  
**Girls' doubles (18 and under)**—Darlene Hard, Montebello, Calif.-Barbara Breit  
**Girls' singles (15 and under)**—Rosa-Marie Reyes, Mexico City  
**Girls' doubles (15 and under)**—Tina Rodi, Beverly Hills, Calif.-Rosa-Marie Reyes  
**Senior singles**—David Freed, Salt Lake City, Utah  
**Senior doubles**—Edward Chandler-Gerald Stratford, San Francisco  
**Women's senior singles**—Mrs. Nell Hopman, Australia  
**Women's senior doubles**—Mrs. Hazel Hotchkiss Wightman, Chestnut Hill, Mass.-Mrs. Nell Hopman

## **INDOOR**

**Singles**—Sven Davidson, Sweden  
**Women's singles**—Mrs. Dorothy Levine, Chicago  
**Doubles**—William F. Talbert, New York-Tony Trabert  
**Women's doubles**—Mrs. Barbara Ward, Moorestown, N. J.-Mrs. Dorothy Levine  
**Mixed doubles**—Lois Felix, Meriden, Conn.-Winslow Blanchard 2d, Boston

## **CLAY COURT**

**Singles**—Bernard Bartzten, San Angelo, Tex.  
**Women's singles**—Maureen Connolly  
**Doubles**—Tony Trabert-E. Victor Seixas, Jr.  
**Women's doubles**—Doris Hart-Maureen Connolly

## **PUBLIC PARKS**

**Singles**—Clyde Hippenstiel, San Bernardino, Calif.  
**Women's singles**—Mrs. Mary Arnold Prentiss, San Bernardino, Calif.

## **INTERCOLLEGIATE**

**Singles**—Hamilton Richardson, Tulane  
**Doubles**—Bob Perry-Ronnie Livingston, U.C.L.A.  
**Team (Penick Bowl)**—U.C.L.A. (15 pts.)

## **Eastern Intercollegiate**

**Singles**—Tom Coss, Swarthmore  
**Women's singles**—Carmel Lampe, Rollins  
**Doubles**—Bobby Payne-Pete Green, North Carolina  
**Women's doubles**—Rene Kirsch-Joan Reinberg, Cornell  
**Team**—North Carolina

## **France**

**Singles**—Tony Trabert  
**Women's singles**—Maureen Connolly  
**Doubles**—Tony Trabert-E. Victor Seixas, Jr.  
**Women's doubles**—Mrs. Nell Hopman-Maureen Connolly  
**Mixed doubles**—Lewis Hoad, Australia-Maureen Connolly

## **Canada**

**Singles**—Bernard Bartzten  
**Women's singles**—Karol Fageros, Miami, Fla.  
**Doubles**—Lorne Main, Toronto-Luis Ayala, Chile

## **Team**

**Wightman Cup (women)**—United States 6, England 0, at Wimbledon, England

## INTERCOLLEGIATE CONFERENCE TEAM CHAMPIONS

### NATIONAL COLLEGIATE

*Source:* Walter Byers, Executive Director, N. C. A. A.

Baseball—Missouri  
Basketball—La Salle (Phila.)  
Boxing—Wisconsin  
Fencing—Columbia and N.Y.U. (tie)  
Golf—Southern Methodist  
Gymnastics—Penn State  
Ice Hockey—Rensselaer Polytechnic Institute  
Skiing—Denver  
Swimming—Ohio State  
Tennis—U.C.L.A.  
Track and Field—Southern California  
Wrestling—Oklahoma A. & M.

(For N. C. A. A. individual champions see index.)

### PACIFIC COAST

Baseball—Oregon  
Basketball—Southern California  
Golf—Oregon (Northern Division); Stanford (Southern Division)  
Gymnastics—U.C.L.A. (Southern Division)  
Swimming—Washington (Northern Division); Stanford (Southern Division)  
Tennis—Washington (Northern Division); U.C.L.A. (Southern Division)  
Track—Southern California  
Water Polo—Stanford (Southern Division)

### BIG TEN

Baseball—Michigan State  
Basketball—Indiana  
Fencing—Illinois  
Golf—Ohio State  
Gymnastics—Illinois  
Swimming—Ohio State  
Tennis—Indiana  
Track (indoor)—Illinois  
Track (outdoor)—Illinois  
Wrestling—Purdue

### MISSOURI VALLEY

Baseball—Oklahoma A. & M.  
Basketball—Oklahoma A. & M.  
Golf—Oklahoma A. & M.  
Tennis—Houston  
Track—Oklahoma A. & M.

### BIG SEVEN

Baseball—Missouri  
Basketball—Colorado and Kansas (tie)  
Golf—Colorado  
Swimming—Iowa State  
Tennis—Colorado  
Track (indoor)—Kansas  
Track (outdoor)—Kansas  
Wrestling—Oklahoma

### ATLANTIC COAST

Baseball—Clemson  
Basketball—North Carolina State  
Golf—Duke  
Tennis—North Carolina  
Track (indoor)—Maryland  
Track (outdoor)—Maryland

### E. C. A. C.

*Source:* George L. Shlebler, Administrative Assistant, Eastern College Athletic Conference.

Baseball League—Navy  
Basketball League—Cornell

### Fencing

#### INTERCOLLEGIATE ASSOCIATION

Three-weapon—Columbia  
Foil—Columbia and Cornell (tie)  
Epee—Columbia  
Saber—Columbia

### Golf

Eastern Association—Yale

### Gymnastics

Eastern League—Penn State

### Ice Hockey

Pentagonal League—Harvard

### Rowing

#### INTERCOLLEGIATE ASSOCIATION

Varsity—Navy  
Junior varsity—Cornell  
Freshman—Cornell

#### ASSN. OF ROWING COLLEGES

Varsity—Navy  
Junior varsity—Navy  
Freshman—Cornell  
Lightweight varsity—M.I.T.  
Lightweight junior varsity—Cornell  
Lightweight freshman—Harvard

### Swimming

Eastern League—Yale

### Tennis

Eastern Assn.—Princeton and Yale (tie)

### Track and Field

#### OUTDOOR

Heptagonal Games Assn.—Yale  
I.C.A.A.A.—Penn State  
Metropolitan (N. Y.) Assn.—Manhattan  
Middle Atlantic Assn.—La Salle

#### INDOOR

Heptagonal Games Assn.—Yale  
I.C.A.A.A.—Yale  
Metropolitan (N. Y.) Assn.—Manhattan

### Wrestling

Eastern Assn.—Pittsburgh

(For E.C.A.A. individual champions see index.)

### SOUTHWEST

Baseball—Texas  
Basketball—Rice and Texas (tie)  
Fencing—Texas A. & M.  
Golf—Texas  
Swimming—Southern Methodist  
Tennis—Texas  
Track—Texas

## SWIMMING

## A. A. U. Championships

## Men's Outdoor

(At Indianapolis, Aug. 5-8)

100-m. free—Richard Cleveland, Hawaii S. C.	0:57.5
200-m. free—Ford Konno, Honolulu	2:10.6
400-m. free—William Woolsey, Honolulu	4:42.3
1,500-m. free—Ford Konno	19:07.1
100-m. back—Albert Wiggins, Pittsburgh	1:07.2
200-m. back—Albert Wiggins	2:31.0
100-m. butterfly—Dick Fadgen, North Carolina State	1:07.4
200-m. breast—Dick Fadgen	2:49.5
400-m. medley—Burwell Jones, Ann Arbor, Mich.	5:29.0
800-m. free-style relay—New Haven S. C. "A" team (Wayne Moore, David Armstrong, John Marshall, John Phair)	9:07.9
400-m. medley relay—North Carolina State (Bill Sonner, Bob Mattson, Dick Fadgen, Dave McIntyre)	4:34.7
3-m. dive—Joaquin Capilla, Mexican Swimming Federation, Mexico City	579.35 pts.
10-m. dive—Joaquin Capilla	535.50 pts.
Team—North Carolina State College	54 pts.

## Women's Outdoor

(At Indianapolis, Aug. 5-8)

100-m. free—Jody Alderson, Community Builders S. C., Chicago	1:06.1
400-m. free—Carolyn Green, Fort Lauderdale (Fla.) Swim Association	5:14.7
800-m. free—Carolyn Green	10:49.9
1,500-m. free—Carolyn Green	21:08.5
100-m. back—Shelley Mann, Walter Reed S. C., Washington, D. C.	1:15.5
200-m. back—Barbara Stark, Crystal Plunge Club, San Francisco	2:47.9
100-m. butterfly—Shelley Mann	1:17.0
200-m. breast—Mary Jane Sears, Walter Reed S. C.	3:07.4
400-m. medley—Marie Gillett, Walter Reed S. C.	6:06.9
400-m. medley relay—Walter Reed S. C. (Kay Knapp, Shelley Mann, Mary Jane Sears, Wanda Werner)	5:47.8
800-m. free-style relay—Fort Lauderdale S. A. "A" team (Lois Aspinall, Helen Greenlaw, Marlene Cahill, Carolyn Green)	10:18.7
1-m. dive—Mrs. Patricia K. McCormick, Los An- geles A. C.	492.05 pts.
3-m. dive—Mrs. Patricia K. McCormick	290.05 pts.
10-m. dive—Mrs. Patricia K. McCormick	290.05 pts.
Team—Walter Reed S. C., Washington, D. C.	89 pts.

## National Collegiate

(At Syracuse, March 25-27)

50-yd. free—Dick Cleveland, Ohio State	0:22.3
100-yd. free—Dick Cleveland	0:50.0
220-yd. free—Jack Wardrop, Michigan	2:05.0
440-yd. free—Ford Konno, Ohio State	4:28.6
1,500-meter free—Ford Konno	18:14.4
100-yd. back—Yoshinobu Oyakawa, Ohio State	0:57.0
200-yd. back—Yoshinobu Oyakawa	2:09.8
100-yd. breast—Dave Hawkins, Harvard	0:59.4
200-yd. breast—Dave Hawkins	2:15.4
150-yd. medley—Burwell Jones, Michigan	1:30.1
300-yd. medley relay—Ohio State (Yoshinobu Oya- kawa, Robert VanHeyde, Tom Whiteleather)	2:49.3
400-yd. free-style relay—Michigan (Tom Benner, Ron Gora, Don Hill, Burwell Jones)	3:26.1
1-meter dive—Fletcher Gilders, Ohio State	444.10 pts.
3-meter dive—Morley Shapiro, Ohio State	530 pts.
Team—Ohio State	94 pts.

## Men's Indoor

(At New Haven, Conn., April 1-3)

100-yd. free—Dick Cleveland, unattached, Ohio State	0:49.8
220-yd. free—Ford Konno, unattached, Ohio State	2:06.5
440-yd. free—Ford Konno	4:28.3
1,500-meter free—Ford Konno	19:07.8
100-yd. back—Yoshinobu Oyakawa, unattached, Ohio State	0:56.0
150-yd. back—Yoshinobu Oyakawa	1:30.7
100-yd. butterfly—Dave Hawkins, Harvard	0:58.2
220-yd. breast—Dick Fadgen, Woonsocket (R. I.) Y.M.C.A.	2:42.9
400-yd. medley—Jack Wardrop, unattached, U. of Michigan	4:41.7
400-yd. free-style relay—New Haven S. C. "A" team (James Rae, Donald Sheff, Hendrik Gideonse, Kerry Donovan)	3:25.0
400-yd. medley relay—New York A. C. (Richard Auwater, George Pappas, Thomas McDermott, John Glover)	4:00.9
1-meter dive—David Browning, Pensacola (Fla.) N.A.S.	565.3 pts.
3-meter dive—David Browning	618.80 pts.
Team—New Haven Swim Club	81 pts.
Leading scorer—Ford Konno	21 pts.

## Women's Indoor

(At Daytona Beach, Fla., April 15-17)

100-yd. free—Jody Alderson, Community Builders S. C., Chicago	0:58.5
250-yd. free—Carol Tait, Santa Clara (Calif.) S. C.	2:53.0
500-yd. free—Carol Tait	6:00.6
100-yd. back—Shelley Mann, Walter Reed S. C., Washington, D. C.	1:06.4
200-yd. back—Barbara Stark, unattached, San Francisco	2:27.5
250-yd. breast—Mary Jane Sears, Walter Reed S. C.	3:29.0
100-yd. butterfly—Shelley Mann	1:06.5
400-yd. medley—Shelley Mann	5:18.6
400-yd. medley relay—Walter Reed S. C. "A" team (Shelley Mann, Marie Gillett, Mary Jane Sears, Wanda Werner)	4:37.0
400-yd. free-style relay—Walter Reed S. C. (Kay Knapp, Wanda Werner, Shelley Mann, Marie Gillett)	3:59.2
1-meter dive—Mrs. Patricia K. McCormick, Los Angeles A. C.	463.75 pts.
3-meter dive—Mrs. Patricia K. McCormick	565.80 pts.
Team—Walter Reed S. C., Washington, D. C.	94 pts.
Leading scorer—Shelley Mann	22 pts.

## Eastern Intercollegiate League

(At Princeton, N. J., March 18-20)

50-yd. free—Kerry Donovan, Yale	0:22.5
100-yd. free—Kerry Donovan	0:50.4
220-yd. free—John Glover, Dartmouth	2:08.4
440-yd. free—Bill Yorzyk, Springfield	4:41.2
1,500-meter free—Bill Yorzyk	18:50.7
100-yd. back—Peter Wittereid, Army	1:00.0
200-yd. back—Peter Wittereid	2:12.4
100-yd. breast—Dave Hawkins, Harvard	0:59.7
200-yd. breast—Dave Hawkins	2:15.9
150-yd. medley—Hendrik Gideonse, Yale	1:32.1
300-yd. medley relay—Yale (Hendrik Gideonse, Dennis O'Connor, Kerry Donovan)	2:52.0
400-yd. free-style relay—Dartmouth (John Glover, John Heyn, George Hust, Steve Mullins)	3:31.2
1-meter dive—Ken Welch, Yale	440.80 pts.
3-meter dive—Ken Welch	503 pts.



## ROWING

Source: C. Leverich Brett, Editor, *National Association of Amateur Oarsmen Year Book* and N. A. A. O. *Rowing News*.

## Intercollegiate Rowing Assn.

(At Syracuse, N. Y., June 19)

Varsity (3 miles)—1, Navy (16:04.4); 2, Cornell; 3, Washington; 4, Wisconsin; 5, California; 6, Columbia; 7, Pennsylvania; 8, Boston University; 9, Princeton; 10, M. I. T.; 11, Syracuse.  
Junior Varsity (3 miles)—1, Cornell (16:20.6); 2, Navy; 3, California; 4, Washington; 5, Syracuse; 6, Columbia; 7, Princeton; 8, Pennsylvania.  
Freshman (2 miles)—1, Cornell (10:18.5); 2, Washington; 3, Navy; 4, Princeton; 5, Syracuse; 6, Wisconsin; 7, Pennsylvania; 8, Columbia; 9, M. I. T.  
James Ten Eyck Trophy—Cornell (19 points)

## Assn. of Rowing Colleges

(At Washington, D. C., May 15—2,000 meters)

Varsity—Navy (6:03.4)  
Junior Varsity—Navy (6:21.4)  
Freshman—Cornell (6:15.8)  
Rowe Cup—Navy (18 points)

## LIGHTWEIGHT

(At Princeton, N. J.—1 5/16 miles)

Varsity (Joseph Wright Trophy—M. I. T. (7:10.2)  
Junior Varsity—Cornell (7:33.2)  
Freshman—Harvard (7:41.4)

## Yale-Harvard

(At New London, Conn., June 19)

Varsity (4 miles)—Yale (21:58.4)  
Junior Varsity (2 miles)—Harvard (10:44.8)  
Freshman (2 miles)—Harvard (11:06.4)

## Other Winners

Adams Cup (1 5/16 miles)—Navy (6:08.2)  
Blackwell Cup (2 miles)—Pennsylvania (10:16)  
Carnegie Cup (2 miles)—Cornell (10:30.6)  
Childs Cup (1 3/4 miles)—Pennsylvania (8:59.1)  
Compton Cup (1 3/4 miles)—Harvard (8:49.5)  
Dad Vail Trophy (1 5/16 miles)—Dartmouth (6:30)  
Oxford-Cambridge (4 1/4 miles)—Oxford (20:23)  
Washington-California (3 miles)—Washington (15:21.6)  
Western Sprint (2,000 meters)—Navy (6:29.9)

## 150 POUNDS

Goldthwait Cup (1 5/16 miles) Princeton (no time taken; M. I. T. won the race, but was not eligible to compete for the cup; Princeton finished second)  
Wood-Hammond Cup (1 5/16 miles)—Princeton (6:58.8)

## NATIONAL INTERSCHOLASTIC

(At Worcester, Mass., May 28-29)

8-oared shell—George Washington High, Alexandria, Va. (5:31.6)  
Single sculls—Robert Walker, Grosse Point (Mich.) High

## Oarsmen Continue String

The West Side Rowing Club of Buffalo, N. Y., with 337 points, captured the Canadian Henley team title for the fourth year in a row in 1954. The St. Catharines (Ont.) oarsmen finished second with 128½ points.

## Cocker Spaniel Westminster Best

Champion Carmor's Rise and Shine, a 2-year-old buff-colored cocker spaniel owned by Mrs. Carl E. Morgan of High Point, N. C., gained the 1954 best-in-show award at the Westminster Kennel Club fixture at Madison Square Garden, New York. The Morris and Essex show, America's outdoor classic at Madison, N. J., was not held in 1954, but will be resumed in 1955.

## United States Championships

(At Worcester, Mass., July 17-18)

(Distances 2,000 meters except sprints)

Single sculls—John B. Kelly, Jr., Vesper B. C., Philadelphia 8:45.8  
Assn. single sculls—Pat Costello, Detroit B. C. 8:05.3  
1/4-mile single sculls—Eugene Loveless, New York A. C. 1:29.2  
Double sculls—Walter Hoover, Jr.—Pat Costello, Detroit B. C. 8:10.4  
Quadruple sculls—Detroit B. C. 6:27.6  
Pair-oared shell without coxswain—Charles Logg, Jr.—Thomas Price, Rutgers R. C. 8:28.2  
Pair-oared shell with coxswain—Fairmount R. A., Philadelphia 7:38.8  
4-oared shell without coxswain—West Side R. C., Buffalo 7:14.2  
4-oared shell with coxswain—Vesper B. C. 6:54.4  
8-oared shell—Vesper B. C. 6:55.0  
Intermediate 8-oared shell—Old Dominion B. C., Alexandria, Va. 6:26.2  
150-lb. single sculls—James Barker, Undine Barge Club, Philadelphia 10:04.2  
150-lb. 1/4-mile single sculls—Dick Mahan, Vesper B. C. 1:38.2  
150-lb. double sculls—Dick Mahan—George Ninos, Vesper B. C. 8:28.0  
150-lb. quadruple sculls—Vesper B. C. 6:51.8  
150-lb. 4-oared shell with coxswain—West Side R. C. 7:11.4  
150-lb. 8-oared shell—West Side R. C. 7:16.2  
Team (Barnes Trophy)—Vesper Boat Club 155 pts.

## British Henley

Diamond Sculls—Peter Vlasic, Yugoslavia  
Grand Challenge Cup—U.S.S.R.  
Thames Challenge Cup—Massachusetts Institute of Technology

## Navy Record Marred

The Navy varsity crew, coached by Russell S. (Rusty) Callow, again went unbeaten in 1954, but the middies' record of 29 straight victories over a three-year-period was marred when it was revealed that William Kennington, coxswain, had been ineligible to represent the academy. An "administrative failure" had permitted the midshipman to compete as coxswain of the junior varsity in 1953 and the varsity in 1954. The Navy skien is the best ever compiled in college rowing in this country. Last season the middies won 9 races.

## MEN'S LACROSSE

## 1954 Champions

National Open—Mt. Washington L. C., Baltimore  
National Intercollegiate—U. S. Naval Academy  
North-South Game—North 13, South 11, at Freeport, N. Y.

## 1954 All-American Selections

FIRST TEAM—Goal: John Jones (Navy); defense: Stanley Swanson (Navy), Furlong Baldwin (Princeton), Edward Anderson (Duke); midfield: James Grieves (Virginia), Bruce Yancey (Syracuse), Oliver Combs (Army); attack: Peter Leone (Army), George Corrigan (Maryland), William Hunter (Navy).

SECOND TEAM—Goal: G. P. Moore (Virginia); defense: John Kaster (Navy), Robert Merrick (Yale), Roy Dunway (Army); midfield: Richard Bollinger (Duke), John Giddings (Army), James Fulton (Penn State); attack: Robert Taylor (Johns Hopkins), John Snape (Hobart), Rennie Smith (Maryland).

Cork defeated Wexford by 1 goal and 9 points to 1 goal and 6 points in the 1954 final of the all-Ireland senior hurling championship.

## TRACK AND FIELD

## A. A. U. Championships

## Senior Outdoor

(At St. Louis, June 18-19)

100 yd.—Arthur Bragg, Morgan State	0:09.5
220 yd.—Arthur Bragg	0:21.1
440 yd.—Jim Lea, Los Angeles A. C.	0:46.6
880 yd.—Malvin Whitfield, Los Angeles A. C.	1:50.8
1 mile run—Fred Dwyer, New York A. C.	4:09.5
3 miles—Horace Ashenfelter, New York A. C.	14:18.5
6 miles—Curtis Stone, New York A. C.	31:39.4
120-yd. hurdles—Jack Davis, Los Angeles A. C.	0:14.0
220-yd. hurdles—Jack Davis	0:23.2
440-yd. hurdles—Josh Culbreath, Morgan State	0:52.0
2-mile steeplechase—Bill Ashenfelter, New York A. C.	10:08.2
2-mile walk—Henry H. Laskau, 92d Street Y.M.H.A., New York	14:23.3
Broad jump—John Bennett, Marquette	24 ft. 10½ in.
High jump—Ernie Shelton, Los Angeles A. C.	6 ft. 9½ in.
Discus—Fortune Gordien, Los Angeles A. C.	182 ft. 2 in.
56-lb. weight—Bob Backus, New York A. C.	42 ft. 5½ in.
Hammer—Bob Backus	189 ft. 3 in.
Hop, step, and jump—Claudio Cabrejas, Cuban Physical Education Club	47 ft. 3 in.
Javelin—Franklin eld, San Francisco Olympic Club	249 ft. 8½ in.
Pole vault—Bob Richards, Los Angeles A. C.	15 ft. 3½ in.
Shot-put—Parry O'Brien, Los Angeles A. C.	58 ft. 11½ in.
Team—Los Angeles Athletic Club	124 pts.
All-around—Merwin Carter, Baltimore Olympic Club	5,330 pts.
Marathon—Ted Corbitt, Pioneer Club, New York	2:46:13.9
Decathlon—Robert Richards, Los Angeles A. C.	6,501 pts.
Pentathlon—Brayton Norton, Occidental College	3,400 pts.
440-yd. relay—Chicago C.Y.O. (Ira Murchison, Ralph Butler, Al Pritchett, Willie Williams)	0:40.8
1-mile relay—Pioneer Club (Rudolph Clarence, Frank Bowers, Reginald Pearman, William Persichetty)	3:16.3
1½-miles relay—Pioneer Club (Persichetty, William Cochrane, Pearman, Larry Ellis)	7:41.5

## Senior Indoor

(At Squadron A Armory and Madison Square Garden, New York, Feb. 20)

60 yd.—John Haines, Pennsylvania	0:06.2
600 yd.—Reginald Pearman, Pioneer Club, New York	1:11.4
1,000 yd.—Malvin Whitfield, Los Angeles	2:11.0
1 mile run—Josy Barthel, Luxembourg	4:11.7
3 miles—Horace Ashenfelter, New York A. C.	13:56.7
60-yd. high hurdles—Jack Davis, Los Angeles A. C.	0:07.3
1 mile walk—Henry H. Laskau, 92d Street Y.M.H.A.	6:31.7
1,060-yd. sprint medley relay—Pioneer Club (Frank Bowens, James Ryan, James Gathers, Robert Carty)	1:54.0
1 mile relay—Morgan State (Herman Wade, Otis Johnson, James Rogers, Josh Culbreath)	3:18.2
Broad jump—Neville Price, Oklahoma U.	24 ft. 5½ in.
High jump—Herman Wyatt, Santa Clara Youth Center	6 ft. 8½ in.
Pole vault—Jerry Welbourn, Union City, Ind.	14 ft. 9 in.
Shot-put—Parry O'Brien, Santa Monica, Calif.	59 ft. 4 in.
35-lb. weight—Bob Backus, New York A. C.	63 ft. 5 in.
Team—New York A. C.	22 pts.

Women's A. A. U. Outdoor  
OUTDOOR

(At Harrisburg, Pa., July 30-31)

50 meters—Mabel Landry, Chicago C.Y.O.	0:06.5
100—Barbara Jones, Chicago C.Y.O.	0:12.0
200—Mae Faggs, Tenn. State Univ.	0:24.5
80 hurdles—Constance Darnowski, German-American A. C., New York	0:12.2
280 shuttle hurdle relay—Equitable Life Assurance Society, New York, "A" team (Joan Wolski, Connie Painter, Lauretta Foley, Lenore Leiser)	0:41.2
400 relay—Chicago C.Y.O. "A" team (Hazel Watkins, Alfrances Lyman, Mabel Landry, Barbara Jones)	0:49.0
800 relay—Tenn. State U. (Lucinda Williams, Isabel Daniels, Cynthia Thompson, Mae Faggs)	1:45.2
Broad jump—Mabel Landry	17 ft. 11 in.
High jump—Jeanette Cantrell, Tuskegee Institute, and Verneda Thomas, Chicago C.Y.O. (tie)	5 ft. ¼ in.
Discus—Marjorie Larney, Equitable Life	120 ft. 11½ in.
Javelin—Karen Anderson, Mercury A. C.	127 ft. 1 in.
8-lb. shot-put—Lois Testa, Red Diamond A. C., Boston	41 ft. 11¾ in.
Baseball throw—Marion Brown, Gulf Coast A. C., Houston, Tex.	245 ft. ½ in.
Team—Chicago C.Y.O.	110 pts.

## INDOOR

(At 102d Engineers Armory, New York, March 27)

50 yd.—Mabel Landry, Chicago C.Y.O.	0:06.1
100—Barbara Jones, Chicago C.Y.O.	0:11.3
220—Mae Faggs, Tenn. State Univ.	0:26.5
50-yd. hurdles—Barbara Mueller, Chicago C.Y.O.	0:07.4
280-yd. shuttle hurdle relay—Equitable Life (Joan Wolski, Connie Painter, Amelia Wershaven, Lenore Leiser)	0:41.7
440-yd. relay—Chicago C.Y.O. "A" team (Mabel Landry, Barbara Jones, Rebecca Ayars, Alfrances Lyman)	0:52.0
440-yd. medley relay—Chicago C.Y.O. "A" team (Misses Ayars, Lyman, Jones, Landry)	0:53.0
Standing broad jump—Cynthia Lane, Police Athletic League, New York	7 ft. 10½ in.
High jump—Barbara Mueller	4 ft. 10½ in.
8-lb. shot-put—Paula Deubel, Little Rhody A. C., Providence	39 ft. 11¾ in.
Basketball throw—Catherine Walsh, Equitable Life	104 ft. 3½ in.
Team—Chicago C.Y.O.	39 pts.

## NATIONAL COLLEGIATE

(At Ann Arbor, Mich., June 11-12)

100 yd.—Willie Williams, Illinois	0:09.5
220—Charles Thomas, Texas	0:20.7
440—James Lea, So. California	0:46.7
880—Arnold Sowell, Pittsburgh	1:50.5
1 mile—Bill Dellinger, Oregon	4:13.1
2 miles—Kikuo Moriya, Wheaton	9:22.7
120 hurdles—Willard Thomson, Illinois	0:14.2
220 hurdles—Joe Corley, Illinois	0:26.6
Broad jump—John Bennett, Marquette	25 ft. 10½ in.
High jump—Ernie Shelton, So. California	6 ft. 10½ in.
Discus—Jim Dillion, Auburn	176 ft. 3 in.
Javelin—Leo Long, Stanford	226 ft. 8½ in.
Pole vault—Larry Anderson, California, and Earl Poucher, Florida (tie)	14 ft. 2 in.
Shot-put—Tom Jones, Miami (Ohio)	54 ft. 2½ in.
Team—Southern California	66 17/20 pts.

## INTERCOLLEGIATE A. A. A.

## OUTDOOR

(At Randalls Island, New York, May 28-29)

100 yd.—Art Pollard, Penn State.....	0:09.6
220—Henry Thresher, Yale.....	0:20.7
440—Louis Jones, Manhattan.....	0:47.3
880—Arnold Sowell, Pittsburgh.....	1:50.3
1 mile—Richard Ollen, Northeastern.....	4:15.4
2 miles—Robert Hollen, Penn State.....	9:22.1
120 hurdles—Joel Shankle, Duke.....	0:14.3
220 hurdles—Lester Goble, Alfred.....	0:23.3
Mile relay—Manhattan (Bob English, Ron Lucas, Vern Dixon, Louis Jones).....	3:12.1
Broad jump—John Bennett, Marquette.....	24 ft. 7½ in.
High jump—Frank Gaffney, Manhattan, and John Bennett (tie).....	6 ft. 4¾ in.
Discus—Stewart Thomson, Yale.....	165 ft.
Hammer—Martin Engel, N. Y. U.....	183 ft.
Javelin—Al Cantello, La Salle.....	205 ft. 7½ in.
Pole vault—James Gulick, Temple; Daniel Lorch, Penn State; Bruce Hescocock, Boston U., and Robert Owen, Penn (tie).....	13 ft. 4 in.
Shot-put—Roosevelt Grier, Penn State.....	53 ft. 10¾ in.
Team—Penn State.....	32½ pts.

## TABLE TENNIS

## World Championships

(At London, April 6-14)

Singles—Ichiro Ogimura, Japan  
 Women's singles—Mrs. Angelica Roseanu, Rumania  
 Doubles—Vilim Harangozo-Zarko Dolimar, Yugoslavia  
 Women's doubles—Diane and Rosalind Rowe, England  
 Mixed doubles—Ivan Andreadis, Czechoslovakia-Mrs. Giselle Farkas Gervai, Hungary  
 Jubilee Cup (for men who competed in world championships 21 or more years ago)—Michel Haguenauer, France  
 Men's team (Swaythling Cup)—Japan  
 Women's team (Corbillion Cup)—Japan

## United States Open

(At Cleveland, March 19-21)

Singles—Richard Miles, New York  
 Women's singles—Mildred Shahian, Chicago  
 Doubles—Bernard Bukiet, Chicago-Tibor Hazi, Washington, D. C.  
 Women's doubles—Mrs. Leah Thall Neuberger, New York-Mildred Shahian  
 Junior singles—Robert Gusikoff, New York  
 Girls' junior singles—Sharlene Krizman, South Bend, Ind.  
 Mixed doubles—Sol Schiff, New York-Mrs. Sally Green Prouty, Chicago  
 Boys' singles—Erwin Klein, Los Angeles  
 Senior singles—Tibor Hazi, Washington, D. C.  
 Senior doubles—Eugene Bricker, Jeffersonville, Ind.—Bernard Hock, New Albany, Ind.  
 Esquire singles (men 50 years old or over)—Louis Scharlack, San Antonio, Tex.

## WEIGHT LIFTING

## National A.A.U. Championships

(At Los Angeles, June 25-26)

Class	Pounds
123 lb.—Charles Vinci, Olympic Health Club, Cleveland.....	620
132 lb.—Yas Kuzuhara, York (Pa.) Barbell Club.....	685
148 lb.—Joseph Pitman, York B. C.....	755
165 lb.—Bert Elliott, Vince's Gym, Puente, Calif.....	765
181 lb.—Tommy Kono, Yarik's Gym, Oakland, Calif.....	930
198 lb.—Dave Sheppard, York B. C.....	975
Heavyweight—Norbert Schemansky, Northern Y.M.C.A., Detroit.....	1,050

## INDOOR

(At Squadron A Armory and Madison Square Garden, New York, Feb. 27)

60 yd.—John Haines, Pennsylvania.....	0:06.3
600—Louis Jones, Manhattan.....	1:11.3
1,000—Thomas Courtney, Fordham.....	2:10.9
Mile—Richard Ollen, Northeastern.....	4:20.1
2 miles—Edward Shea, Northeastern.....	9:24.5
60 high hurdles—Warren Lattof, M. I. T.....	0:07.5
Mile relay—Princeton (Thomas Eglin, Richard Yaffa, R. Tempest Lowry, Joseph Meyers, Jr.).....	3:21.5
2-mile relay—Syracuse (Jack Hubbard, Les Vielbig, Don Shupe, Steve Armstrong).....	7:42.8
Broad jump—Bernard Bruce, Boston U.....	23 ft. 4¾ in.
High jump—Frank Gaffney, Manhattan, William Antoine, M. I. T., and Wilfred Lee (tie).....	6 ft. 4¾ in.
Pole vault—Bruce Hescocock, Boston U.....	14 ft.
Shot-put—Albert Thompson, Columbia.....	52 ft. 10¾ in.
35-lb. weight—Martin Engel, N. Y. U.....	57 ft. 6½ in.
Team—Yale.....	19 pts.

## CONTRACT BRIDGE, 1953-54

Source: American Contract Bridge League.

## Champions

National open individual—Mrs. M. R. McCracken, Albuquerque, N. M.  
 Master mixed pairs—Mr. and Mrs. Paul H. Hodge, Abilene, Tex.  
 National women's team—Mrs. I. E. Schwarz, Cleveland; Mrs. Jeff Glick, Miami, Fla.; Mrs. Harold Feldstein and Mrs. Leonard Goldstein, Cincinnati  
 National men's team—Ben Fain, John Gerber and Harold Rockaway, all Houston; George Heath, Dallas; Paul H. Hodge, Abilene, Tex.  
 National open pairs—Byron Greenberg, Tulsa, Okla., and Harold Rockaway, Houston  
 National non-master pairs—Roger Sarfaty and Steve Greenberg, Oklahoma City  
 Life master individual—Edward Burns, Miami Beach, Fla.  
 Senior master individual—Donald Rutsteln, Chicago  
 Vanderbilt Cup team—Dr. Kalman Apfel, Francis P. Begley, Ned Drucker, Sidney Mandell and Milton Moss, all New York  
 National mixed team—Charles H. Goren and Sidney Silodor, Philadelphia; Mrs. Margaret Wagar, Atlanta; Mrs. Helen Sobel, New York  
 Master knockout team—William Rosen and Milton Ellenby, Chicago; Clifford Bishop, Detroit; Lew Mathe, Los Angeles; John Moran, Houston  
 Life master pairs—David C. Carter, St. Louis, and John Hubbell, Kansas City, Mo.  
 Master pairs—Armand Fahrner and Richard B. Troxel, Dayton, Ohio  
 National men's pairs—Eric R. Murray, Hamilton, Ont., and Douglas Drury, Toronto, Ont.  
 National women's pairs—Mrs. Margaret Alcorn, Hampton, Va., and Mrs. Sally Neely, Warwick, Va.  
 National non-master team—Mrs. Don Currie, Fort Wayne, Ind.; Kent Boyle, Chevy Chase, Md.; Thomas Burris, Raleigh, N. C., and Louis Sepkin, Gary, Ind., tied with Edward G. Worden Jr., Claymore, Md.; Ralph C. Shreyer, R. G. Clarkson, and A. G. Sparks, all Wilmington, Del.  
 World team—Douglas Steen and Lew Mathe, Los Angeles; Don Oakie, San Francisco; William Rosen and Milton Ellenby, Chicago, and Clifford Bishop, Detroit

## Chiefs Win Roller Derby Title

The New York Chiefs captured the Eastern Division title in the National Roller Derby League by defeating the Chicago Westerners, 40 to 34, in the final 1954 play-off at the Ninth Regiment Armory in New York. The victory gave the Chiefs a 5-2 record in the competition.



## BOXING

Source: Murray Goodman, Publicity Director, International Boxing Club.

## World Championship Fights in 1954

Date	Winner	Loser	Title at stake	Where held	Rounds	Attendance
Jan. 27	Archie Moore	Joey Maxim	Light heavyweight	Miami, Fla.	15	16,375
Mar. 5	*Paddy De Marco	James Carter	Lightweight	New York	15	5,730
April 2	Carl Olson	Kid Gavilan	Middleweight	Chicago	15	18,582
May 2	Jimmy Carruthers	Chamrern Songitrat	Bantamweight	Bangkok	12	50,000
May 24	Yoshio Shirai	Leo Espinosa	Flyweight	Tokyo	15	35,000
June 17	Rocky Marciano	Ezzard Charles	Heavyweight	New York	15	47,585
Aug. 11	Archie Moore	Harold Johnson	Light heavyweight	New York	KO 14	8,327
Aug. 20	Carl Olson	Rocky Castellani	Middleweight	San Francisco	15	11,873
Sept. 17	Rocky Marciano	Ezzard Charles	Heavyweight	New York	KO 8	34,330
Sept. 19	*Robert Cohen	Chamrern Songitrat	Bantamweight	Bangkok	15	60,000

\* Won title.

## AMATEUR BOXING

## National A.A.U. Championships

(At Boston, April 13-15)

112 lb.—Charles Branch, Philadelphia  
 119 lb.—Bill Ramos, New Bedford, Mass.  
 125 lb.—Stanford Fitzgerald, Buffalo, N. Y.  
 132 lb.—Garrett Hart, Philadelphia  
 139 lb.—Robert Shell, New York  
 147 lb.—Joe Bethea, Seattle, Wash.  
 156 lb.—John Houston, Oakland, Calif.  
 165 lb.—Don McCray, Roxbury, Mass.  
 178 lb.—Warren Lester, Baltimore  
 Heavyweight—Reuben Vargas, San Francisco  
 Team—New England

## National Collegiate

(At State College, Pa., April 8-10)

119 lb.—Gary Garber, Maryland  
 125 lb.—Seiji Naya, Hawaii  
 132 lb.—Vince Palumbo, Maryland  
 139 lb.—John Granger, Syracuse  
 147 lb.—Herb Odom, Michigan State  
 156 lb.—Bob Meath, Wisconsin  
 165 lb.—Gordon Gladson, Washington State  
 178 lb.—Adam Kois, Penn State  
 Heavyweight—Mike McMurtry, Idaho State  
 Team—Wisconsin (19 pts.)  
 John S. LaRowe Trophy (outstanding boxer)—Bob Meath

## Intercollegiate Association

(At Charlottesville, Va., March 12-13)

125 lb.—Gary Garber, Maryland  
 132 lb.—Gerry Jaffe, Syracuse  
 139 lb.—Haywood Hansell, Army  
 147 lb.—Jack Stokes, Penn State  
 156 lb.—Pete Potter, Virginia  
 165 lb.—Estel Nichols, Virginia  
 178 lb.—Adam Kois, Penn State  
 Heavyweight—Leo Coyne, Maryland  
 Team—Maryland (35 pts.)

## AUTO RACING

## Indianapolis 500-Mile Race

## LEADING FINISHERS

1—Bill Vukovich, Fresno, Calif., with a Fuel Injection Special.  
 Time—3 hours 49 minutes 17.27 seconds (record). Average  
 —130.840 m. p. h. Purse—\$74,934.84.  
 2—Jimmy Bryan, Phoenix, Ariz., Dean Van Lines Special.  
 Average—130.178 m.p.h. Purse—\$35,884.84.  
 3—Jack McGrath, South Pasadena, Calif. Average—130.086.  
 Purse—\$26,909.84.  
 The total purse of \$269,375 was a record for the event.

## SKIING

## World Championships

## NORDIC EVENTS

(At Falun, Sweden, Feb. 13-21)

Jumping—Matti Pietikainen, Finland... 232 pts.  
 Combined jumping and cross-country—  
 Sverre Stenersen, Norway... 461.1 pts.  
 15-km. (9.3 miles) cross-country—Veikko  
 Hakulinen, Finland... 55:26.0  
 30-km. (18.6 miles) cross-country—Vladimir  
 Kusin, Russia... 1:50:25.0  
 50-km. (31 miles) cross-country—Vladimir  
 Kusin... 3:02:58.0  
 40-km. relay—Finland (Aukusti Kiruru,  
 Tapio Makela, Arvo Viitanen, Veikko  
 Hakulinen)... 2:16:47.0  
 Women's 10-km. cross-country—Lubov  
 Kosyрева, Russia... 40:14.0  
 Women's 15-km. relay—Russia (Lubov  
 Kosyрева, Margarita Maslennikova, Valen-  
 tintina Tsareva)... 1:05:54.0

## ALPINE EVENTS

(At Are, Sweden, Feb. 27-March 7)

Downhill—Christian Prayda, Austria... 1:59.6  
 Slalom—Stein Eriksen, Norway... \*2:20.06  
 Combined downhill-slalom—Stein Erik-  
 sen... 4.08 pts.  
 Giant slalom—Stein Eriksen... 1:52.5

## WOMEN

Downhill—Ida Schöpfer, Switzerland... 1:59.6  
 Slalom—Trude Klecker, Austria... \*2:01.93  
 Combined downhill-slalom—Ida Schöpfer... 4.75 pts.  
 Giant slalom—Lucienne Schmith-Countet,  
 France... 1:38.9

\* Two runs.

## United States Champions

Jumping—Roy Sherwood, Salisbury, Conn.  
 18-km. cross-country—Tauno Pulkkinen, Brooklyn  
 (1:23:11.0)  
 30-km. cross-country—Tauno Pulkkinen (2:11:10.0)  
 Classic combined—Norman Oakvik, Minneapolis  
 (423.5 pts.)  
 Downhill—Dick Bueck, Sun Valley, Idaho  
 Slalom—Chiharu Igaya, Hanover, N. H.  
 Combined downhill-slalom—Chiharu Igaya  
 Giant slalom—Darrell Robison, Salt Lake City,  
 Utah  
 Roch Trophy—Chiharu Igaya

## WOMEN

Downhill—Nancy Banks, Seattle  
 Slalom—Jill Kinmont, Bishop, Calif.  
 Combined downhill-slalom—Nancy Banks  
 Giant slalom—Dorothy Modenese, Seattle  
 Roch Trophy—Kathy Butterworth, Aspen, Colo.

## INTERCOLLEGIATE

Cross-country (8 miles)—Marvin Crawford, Denver  
 (50:09.0)  
 Jumping—Willis Olson, Denver  
 Downhill—Pat Myers, Nevada  
 Slalom—John L'Orange, Denver  
 All-around team—Denver (384 pts.)

Don Hutson, during his eleven years (1935-45) as an end for the Green Bay Packers of the National Football League, caught 489 passes, made 101 touchdowns, and scored 825 points, all circuit records.

**SQUASH RACQUETS****Team**

Lapham Trophy (men)—United States 14, Canada 1, at Hartford, Conn.

**United States Champions**

Open—Henri Salaun, Boston  
 Singles—G. Diehl Mateer, Jr., Philadelphia  
 Doubles—Richard Squires, New York—G. Diehl Mateer, Jr.  
 Professional—John Warzycki, Cleveland  
 Intercollegiate—Roger Campbell, Princeton  
 Intercollegiate team—Harvard  
 Veterans—Germain G. Glidden, New York

**WOMEN**

Singles—Lois Dilks, Upper Darby, Pa.  
 Doubles—Mrs. John Newlin—Mrs. Donald Manley-Power, Philadelphia  
 Veterans—Mrs. Ellwood I. Beatty, Jr., Cynwyd, Pa.  
 Team—Philadelphia

**Other Champions**

Cowles Invitation—Henri Salaun  
 Western singles—Ed Hahn, Detroit  
 Canadian singles—G. Diehl Mateer, Jr.  
 New York State singles—Calvin D. MacCracken, Princeton Club, New York

**RACQUETS**

National singles—Geoffrey Atkins, Chicago  
 National doubles—Geoffrey Atkins—William Wood-Prince, Chicago  
 Tuxedo Gold Racquet—Geoffrey Atkins  
 Canadian singles—Geoffrey Atkins  
 Canadian doubles—Kenneth A. Wagg, New York—Geoffrey Atkins

**COURT TENNIS**

National singles—Alastair B. Martin, Glen Head, N. Y.  
 National doubles—Frank Shields, New York—Alastair B. Martin  
 Tuxedo Gold Racquet—Alastair B. Martin  
 North American professional—Jack Johnson, Racquet and Tennis Club, New York  
 Intercollegiate team (Van Alen Trophy)—Yale

**SQUASH TENNIS**

National singles—H. Robert Reeve, Bayside (N. Y.) Tennis and Squash Club

**BOWLING****CHAMPIONS****American Bowling Congress**

	Score
All-events—Brad Lewis, Ashland, Ohio.....	1985
Singles—Tony Sparando, Rego Park, N. Y.....	723
Doubles—Don McClaren, St. Louis—Billy Welu, Houston, Tex.....	1335
Team—Tri-Par Radio, Chicago.....	3226

**Woman's International B. C.**

	Score
All-events—Anne Johnson, Hazleton, Pa.....	1880
Singles—Mrs. Helen Martin, Peoria, Ill.....	668
Doubles—Frances Stennett—Rose Gacioch, Rockford, Ill.....	1244
Team—Marhoefer Weiners, Chicago.....	2734

**Match Game**

	Pts.
Men—Don Carter, Detroit.....	308.02
Women—Marion Ladewig, Grand Rapids, Mich.....	148.29

**CYCLING****World Championships**

(At Cologne and Solingen, Germany, Aug. 21-29)

Professional road—Louison Bobet, France  
 Amateur road—Emile Van Cautier, Belgium  
 Professional sprint—Reg Harris, Great Britain  
 Amateur sprint—Cyril Peacock, Great Britain  
 Professional pursuit—Guido Messina, Italy  
 Amateur pursuit—Leonardo Faggin, Italy  
 Professional motor-paced—Adolphe Verschueren, Belgium

**United States Amateur**

(At Minneapolis, July 24-25)

Open—Jack Disney, Altadena, Calif.  
 ½-mile—Jack Disney  
 Mile—Dick Cortright, Buffalo, N. Y.  
 5 miles—Jack Disney  
 10 miles—Harry Backer, San Diego, Calif.  
 Junior open—Bob Zumwalt, Jr., San Diego, Calif.  
 Girls' open—Nancy Nieman, Detroit

**Bobet Repeat Victor**

Louison Bobet of France captured cycling's Tour de France for the second year in succession in 1954. Bobet covered the 3,017-mile grind, which was raced in 23 stages (days), in 140 hours 6 minutes 5 seconds. The winner led the runner-up Ferdinand Kubler of Switzerland, by nearly 15 minutes. Kubler won the classic in 1950.

The 1954 event attracted 110 starters, with 69 finishing. Bobet averaged 21.4 miles per hour.

The leading finishers:

	h. m. s.
1. Louison Bobet, France.....	140:06:05
2. Ferdinand Kubler, Switzerland.....	140:21:54
3. Fritz Schaer, Switzerland.....	140:27:51
4. Jean Dotto, France (E).....	140:34:26
5. Jean Mallejac, France (W).....	140:37:43
6. Stan Ockers, Belgium.....	140:42:07
7. Louis Bergaud, France (SE).....	140:44:00
8. Vincent Vitetta, France (SO).....	140:47:19
9. Jean Brankart, Belgium.....	140:48:13
10. Gilbert Bauvin, France (NEC).....	140:48:26
Team champion—Switzerland.	

**DUCKPINS****National Tournament Champions**

	Score
All-events—Frank D'Imperio, Indian Head, Md.....	1259
Singles—Vince Della, Baltimore.....	443
Doubles—Harold Carbaugh—Charles Harshman, Hagerstown, Md.....	834
Team—Patterson's, Baltimore.....	1976
Mixed doubles—Florence Reynolds, Waterbury, Conn.—Harry Peters, Bristol, Conn.....	794

**WOMEN**

All-events—Mary Kuebler, Baltimore.....	1139
Singles—Elaine Perlin, Norfolk, Va.....	399
Doubles—Libby Rakowski—Juanita Johnson, Baltimore.....	787
Team—Hyattsville, Washington, D. C.....	1740

**Pointer Shooting Dog Champion**

Wycott's Eufaula Celebration won the 1954 national shooting dog championship at Union Springs, Ala. The pointer is owned by the Wycott Plantation Kennels, near Eufaula, Ala.

## MOTORBOATING

## Major Trophy Winners

**Gold Cup**—Slo-Mo-Shun V, Lou Fageol, driver;  
**Stanley S. Sayres**, Seattle, owner  
**Silver Cup**—My Sweetie Dora, Jack Bartlow, driver;  
 Horace Dodge, Detroit, owner  
**Detroit Memorial Trophy**—Gale V. Lee Schoenith,  
 driver; Joseph A. Schoenith, Detroit, owner  
**Aaron DeRoy Plaque**—Joseph A. Schoenith  
 Col. Green Star Island Trophy—Bob Cramer, Fort  
 Pierce, Fla.  
**Maple Leaf Trophy**—Joseph A. Schoenith  
 Lt. J. J. Meehan, Jr., Trophy—Joseph A. Schoenith  
**International Grand Prix**—Mario Verga, Milan,  
 Italy

## National Inboard Champions

## HYDROPLANES

**135 cubic inch**—Eight Ball, J. C. Townsend, Port  
 Arthur, Tex.  
**225 cubic inch**—Stinger III, Dr. W. P. Linss, High-  
 land Heights, Ky., driver; Ray Smith, Jr., St.  
 Louis, owner  
**7 litre**—So Long, Ray Fageol, Cuyahoga Falls, Ohio,  
 driver; L. J. Fageol, Cuyahoga Falls, owner

## RUNABOUTS

**E racing**—Roughneck, Bob Willis, Long Beach,  
 Calif.  
**D service**—Skip, Harry Bickford, Hampton, Va.  
**F service**—Miss You, Bill Engle, Washington, Pa.  
 F service—Nitrogen, H. G. Hibbert, Miami, Fla.,  
 driver; Sam Dupont, Wilmington, Del., owner

## National Outboard Champions

## STOCK RUNABOUTS

(At DePere, Wis., Aug. 28-29)

**JU**—7-W, Michael Helm, Tientsville, Wis.  
**AU**—Yankee Rebel, Richard O'Dea, Paterson, N. J.  
**BU**—Rickie, Eddie West, Berkeley, Calif.  
**CU**—CU Serpent, Ron Loomis, Santa Barbara,  
 Calif.  
**DU**—Hy Jacker, John Jackson, Cincinnati  
**BSH**—Hayseed, Bob Parish, Bakersfield, Calif.  
**DSH**—548-M, Frank Huebner, Bay City, Mich.

## 1954 Awards

(Based on high-point competition in 1953)

**Col. Green Round Hill Trophy**—Tommy Ingalls,  
 Los Angeles  
**E. C. Kiekhaefer Trophy**—Richard O'Dea, Paterson,  
 N. J.  
**Charles E. Rochester Medal**—Tom Small, Mil-  
 waukee  
**George H. Townsend Medal**—Doug Creech, Char-  
 lotte, N. C.

## Pereira Captures Channel Swim

Batista Pereira of Portugal won the third international English Channel swim-  
 ming race on Aug. 21, 1954, with Mareeh  
 Hassan Hammad of Egypt, who now has  
 made the crossing four times, the run-  
 ner-up. Pereira, who started from Cape  
 Griz Nez, France, and landed near St.  
 Margaret's Bay in England, was timed in  
 12 hours 25 minutes. Brenda Fisher, the  
 first woman to finish, was clocked in 14  
 hours 36 minutes. Miss Fisher set the  
 women's record of 12 hours 43 minutes in  
 1951. The men's record of 10 hours 50  
 minutes was made by Hassan Abd-el-  
 Rehim of Egypt in 1950.

Glen Burlingame of Chicago also con-  
 quered the Channel on Aug. 21, but was  
 not a contestant in the race. Burlingame,  
 who had made four previous attempts to  
 negotiate the waters, made the crossing in  
 14 hours 10 minutes.

Murat Giler of Turkey became the first  
 to swim the Channel in 1954 when he  
 went from Cape Griz Nez to St. Margaret's  
 Bay in 16 hours 50 minutes on Aug. 15.

## CANOEING

Source: Walter Haner, Jr., Chairman, National Pad-  
 dling Committee, American Canoe Association.

## U. S. Paddling Championships

(At New York, Aug. 8-1,000-Meter course)

## SENIOR

	Time
1-man single blade—Frank Havens, Wash- ington C. C.	4:18.2
Tandem single—Frank Krick-John Haas, Philadelphia C. C.	4:47.0
4-man single—Philadelphia C. C. (J. Haas, H. Rotzell, R. Harrington, F. Krick)	3:51.0
1-man double—Bob Dermond, Yonkers C. C.	4:01.0
Tandem double—Art Potter-John VanDyke, Potomac Boat Club, Washington	3:22.1
4-man double—Yonkers C. C. (T. Budrock, J. Pagkos, H. Weidner, M. Budrock)	3:30.1
Goodenough Trophy—Art Potter	10 3/4 pts.

## TEAM POINT SCORES

Potomac B. C.	38	Wanda C. C.	4
Yonkers C. C.	34	Samoset C. C.	3
Philadelphia C. C.	13	Seabag C. C.	1
Washington C. C.	9	Turkeyfoot K. C.	0
Inwood C. C.	6	Western Division	0

## JUNIOR

1-man single—Art Potter	4:25.0
Tandem single—Tom Budrock-Jim Pagkos, Yonkers C. C.	4:59.0
4-man single—Potomac B. C. (W. Schuette, W. Haase, A. Potter, T. Jones)	3:51.9
1-man double—Jim Pagkos, Yonkers C. C.	4:07.8
Tandem double—Art Potter-John VanDyke	3:23.1
4-man double—Potomac B. C. (J. VanDyke, R. Wooley, G. Gibbs, T. Lennahan)	3:49.1

## North American Racing

(At Washington, Sept. 5-1,000 Meters)

1-man single—Don Stringer, Sudbury (Ont.) C. C.	5:32.8
Tandem single—Tom Hodgson-William Stevenson, Island C. C., Toronto	5:20.2
4-man single—Island C. C. (Art Dierden, Paul Lambert, Gus Lamantia, Jack Hay- ward)	4:57.6
1-man double—Robert Smith, Lachine C. C., Montreal	4:59.8
Tandem double—Lou Lukanovich-John McMorran, Sudbury C. C.	4:22.8
4-man double—Grand Trunk Boat Club, Montreal (Robert Corder, Jack McKee, Al McCleery, Ed Clark)	4:34.2
Team point score—Canada 43, United States 11	

## Sugar Island Races

Championship Trophy (1-mile double blade)—  
 Michael Budrock, Yonkers C. C.  
 Wilkin Trophy (4-man single)—Inwood C. C.  
 J. K. Hand Trophy (4-man double)—Inwood C. C.

## U. S. Sailing

Decked—Adolph Morse, Phoenix C. C., Linden-  
 hurst, N. Y.  
 Cruising sailing—Stephen Lysak, Yonkers C. C.

## A.A.U. Long-Distance Swim Champions

## MEN

(At Shakamak State Park, Ind., Aug. 20)

Individual (4 miles)—Frank Brunell, Philadelphia	1:35:53.4
Team—Huntington, Ind.	19 pts.

## WOMEN

(At Mt. Clemens, Mich., July 31)

Individual (3 miles)—Helen Hughes, Lafayette (Ind.) S. C.	1:21:33.8
Team—Women's City Club, Detroit	16 pts.

## Healey Sets Sports-Car Record

Donald Healey of England, driving an  
 Austin-Healey, set a world sports-car re-  
 cord for a measured mile at the Bonneville  
 Salt Flats in Utah on Aug. 22, 1954, when  
 he was timed in 192.62 miles per hour.



## GOLF

## Championships

## Medal Play

U. S. Open (at Springfield, N. J.)—Ed Furgol, Clayton, Mo.	284
British Open (at Southport, England)—Peter Thomson, Australia	283
World Open (at Tam O'Shanter)—Bob Toski, Livingston, N. J.	274
All-American Open—Jerry Barber, La Canada, Calif.	277
All-American Amateur—Arnold Palmer, Cleveland	285
World Amateur (at Tam O'Shanter)—Frank Stranahan, Toledo	284
French Open—Flory Von Donck, Belgium	275
Mexican Open—Johnny Palmer, Charlotte, N. C.	286
Australian Open—Ossie Pickworth, Australia	280
Belgian Open—Dai Rees, Wales	287
Great Lakes Amateur—Tommy Brennan, Jr., Milwaukee	288
Negro National—Charles Sifford, Philadelphia	283
U. S. Seniors—Ellis Knowles, Rye, N. Y.	*148
U. S. Blind—Fred Shields, West Boylston, Mass.	205

\* Won play-off.

## WOMEN

U. S. Open (at Peabody, Mass.)—Mrs. Mildred Didrikson Zaharias, Niles, Ill.	291
All-American—Mrs. Zaharias	294
All-American Amateur—Mary Wright, San Diego, Calif.	315
World Open (Tam O'Shanter)—Patty Berg, Chicago	298
World Amateur (Tam O'Shanter)—Mary Wright	309
Eastern Amateur—Mrs. Mae Murray Jones, Rutland, Vt.	221
Titleholders—Louise Suggs, Atlanta, Ga.	293
Triangle Round-Robin—Patty Berg	73 pts.
Babe Zaharias Open—Louise Suggs	224
Canadian Amateur Closed—Marlene Stewart, Fonthill, Ont.	232

## Match Play

U. S. Amateur (at Country Club of Detroit)—Arnold Palmer, Cleveland, beat Robert Sweeney, New York, in final, 1 up	
British Amateur (at Gullane, Scotland)—Doug Bachli, Australia, beat Bill Campbell, Huntington, W. Va., in final, 2 and 1	
National P.G.A. (at Keller Course, St. Paul)—Chick Harbert, Northville, Mich., beat Walter Burkemo, Franklin, Mich., in final, 4 and 3	
U. S. Public Links (at Dallas)—Gene Andrews, Pacific Palisades, Calif.	
U. S. Junior (at Los Angeles)—Foster Bradley, Los Angeles	
National Collegiate (at Houston)—Hillman Robbins, Jr., Memphis State	
U. S. Caddie (at Columbus, Ohio)—Gene Cardl, Columbus	
Trans-Mississippi—Jimmy Jackson, Kirkwood, Mo.	
North and South Amateur—Billy Joe Patton, Morganton, N. C.	
Southern Amateur—Lieut. Joe Conrad, Lackland Air Force Base, San Antonio, Tex.	
Western Amateur—Bruce Cudd, Portland, Ore.	
Northwest Amateur—Bobby Fleming, Victoria, B. C.	
Canadian Amateur—Harvie Ward, Jr., San Francisco	
American Seniors—Judd L. Brumley, Greenville, Tenn.	
U. S. Left-Handers—Don Wearley, Toledo	
Negro Amateur—Joe Roach, St. Louis	
Eastern Intercollegiate—Ed Wallace, Pennsylvania	

## WOMEN

U. S. Amateur (at Sewickley, Pa.)—Barbara Romack, Sacramento, Calif., beat Mary (Mickey) Wright, in final, 4 and 2	
British Amateur (at Ganton, England)—Frances Stephens, England	
Western Open—Betty Jameson, San Antonio, Tex.	
Western Amateur—Claire Doran, Cleveland	
North and South—Joyce Ziske, Watford, Wis.	
Canadian Amateur Open—Marlene Stewart, Fonthill, Ont.	
Northwest Amateur—Ruth Jessen, Seattle	
National Intercollegiate—Nancy Reed, George Peabody College, Nashville, Tenn.	
U. S. Junior Girls—Margaret Smith, Guadalajara, Mexico	
Negro Amateur—Thelma Cowan, Los Angeles	

## Team

Americas Cup (amateurs)—U. S. 14, Canada 13, Mexico 0	
Hopkins Trophy (pros)—U. S. 41 1/2, Canada 21 1/2	
Canada Cup (pros)—Australia (Peter Thomson, 277; Kelvin Nagle, 279)	
U. S. Public Links (Harding Trophy)—Dallas (Dick Martin, 76; C. R. James, Jr., 71; Andy Sword, 73)	
National Collegiate—Southern Methodist (572 pts.)	
Eastern Intercollegiate—Yale (603 pts.)	
Lord Derby Trophy (seniors)—Great Britain (30 pts.)	
Curtis Cup (women)—U. S. 6, England 3, at Merion Golf Club, Ardmore, Pa.	

## OTHER P.G.A. WINNERS

	Score
Los Angeles Open—Fred Wampler	281
Bing Crosby Invitation—Dutch Harrison	210
San Diego Open—Gene Littler (amateur, 274); Dutch Harrison (pro)	278
Palm Springs Invitation—Freddie Haas	268
P.G.A. Seniors—Gene Sarazen	214
Eastern Open—Bob Rosburg	263
Phoenix Open—Ed Furgol	(a) 272
Texas Open—Chandler Harper	259
Mexican Open—Johnny Palmer	286
Houston Open—Dave Douglas	277
Baton Rouge Open—Bob Toski	279
Miami Beach 4-Ball—Tommy Bolt—Dick Mayer	(b) 258
Seminole Amateur—Pro—Lew Worsham	136
Azalea Open—Bob Toski	273
Greater Greensboro Open—Doug Ford	(c) 283
Masters—Sam Snead	(d) 289
Las Vegas Invitation—Art Wall, Jr.	278
San Francisco Open—Shelley Mayfield	212
Ardmore Open—Julius Boros	279
Palm Beach Invitation—Sam Snead	62 pts.
Open Open—Bob Toski	277
Colonial Invitation—Johnny Palmer	280
Western Open—Lloyd Mangrum	(e) 277
Virginia Beach Open—Pete Cooper	263
Insurance City Open—Tommy Bolt	(f) 271
Motor City Open—Cary Middlecoff	278
Carlings Open—Julius Boros	(g) 280
Canadian Open—Pat Fletcher	280
Kansas Open—Wally Ulrich	268
Fort Wayne Open—Doug Ford	270
Labatt Open—Bud Holscher	269
Rubber City Open—Tommy Bolt	265
National Celebrities—Marty Furgol	273

(a) Beat Cary Middlecoff in play-off. (b) Beat Julius Boros and Dutch Harrison in play-off. (c) Beat Marty Furgol in play-off. (d) Beat Ben Hogan in play-off. (e) Beat Ted Kroll in play-off. (f) Beat Earl Stewart in play-off. (g) Beat George Fazio in play-off.

## BILLIARDS

## Intercollegiate Champions

Pocket—John Beaudette, Michigan State
Three-cushion—Robert Strange, Michigan State
Straight-rail—Bill Robinson, Florida
Co-ed pocket—Jackie Slusher, Oregon State

## TEAM

Pocket—Wyoming
Three-cushion—Florida
Straight-rail—Cincinnati
Co-ed pocket—Oregon State

## Boys' Clubs of America

Senior—Harry Goldstein, Albany, N. Y. (Beaver St. Branch)
Junior—Marvin Goldstein, Albany, N. Y. (Beaver St. Branch)
Team—Princeton, Ind.

## Lassiter Finishes First

Luther Lassiter of Elizabeth City, N. C., with 10 victories and 2 defeats, captured the unofficial world pocket billiards championship at Philadelphia in March, 1952. Willie Mosconi, the recognized world titleholder, did not participate in the event because it was not sanctioned by the Billiard Congress of America, the governing body of the sport.

## ROLLER SKATING

## A. R. S. A. CHAMPIONS

Source: United States Amateur Roller Skating Association.

## National

(At Washington, D. C., July 5-10)

## SINGLES

Men's senior—Jack DeBeve, Washington, D. C.  
 Women's senior—Margie Adair, Paterson, N. J.  
 Men's intermediate—Terry Eyler, Washington, D. C.  
 Women's intermediate—Avis Cook, Pasadena, Calif.  
 Men's junior—William Ferraro, Livonia, Mich.  
 Women's junior—Audrey Wegmann, Mineola, N. Y.  
 Men's novice—George Bonocore, Paterson, N. J.  
 Women's novice—Theresa Colalo, Bayonne, N. J.  
 Boys' juvenile—Robert McDonald, Trenton, N. J.  
 Girls' juvenile—Arlene Geschwinder, Mineola, N. Y.

## PAIRS

Senior—Jack Crichton-Margie Adair, Paterson, N. J.  
 Women's senior—Margie Adair-Joyce Bonocore, Paterson, N. J.  
 Senior dance—Edward O'Donnell-Barbara McCusker, Mineola, N. Y.  
 Intermediate—George Bonocore-Dawn Brown, Paterson, N. J.  
 Intermediate dance—Carl Henderson-Eileen Lipford, Washington, D. C.  
 Junior—Jack DeBeve-Patricia Ryan, Bladensburg, Md.  
 Junior dance—Fred Wheeler-Nancy Mitchell, Bladensburg, Md.  
 Juvenile—Robert Slawsky-Barbara Karaway, Bayonne, N. J.  
 Juvenile dance—Nicky and Toni Savanetti, Mineola, N. Y.

## FOURS

Senior—Elizabeth, N. J. (Heisler, Ludwig, Laffin, Schmitt)  
 Intermediate—Livonia, Mich. (Lavelly, Lavelly, Parmentier, Faynola)

## SPEED

Men's senior—Donald DeRoo, Paterson, N. J.  
 Women's senior—Ellen Hughes, Bladensburg, Md.  
 Men's intermediate—Raymond Musser, Paterson, N. J.  
 Women's intermediate—Georgia Haber, Alexandria, Va.  
 Men's junior—Jimmie Rice, Bladensburg, Md.  
 Women's junior—Bonnie Post, Paterson, N. J.  
 Men's novice—Norman Whitehead, Alexandria, Va.  
 Women's novice—Jean Hobeck, Alexandria, Va.  
 Boys' juvenile—Glen Brown, Alexandria, Va.  
 Girls' juvenile—Diana Bandstra, Paterson, N. J.

## HORSESHOE PITCHING

## World Title Tournaments

(At Murray, Utah)

## MEN

	W.	L.
Guy Zimmerman, Danville, Calif.....	20	0
Fernando Isais, Los Angeles.....	15	5
Casey Jones, Random Lake, Wis.....	14	3
Ted Allen, Boulder, Colo.....	12	5
Louis Dean, Pomona, Calif.....	11	6
Carl Steinfeldt, Rochester, N. Y.....	11	6
Truman Standard, Canton, Ill.....	9	3
Cletus Chapelle, Portland, Ore.....	7	5
Glenn Anderson, Moline, Ill.....	7	4
Roland Kraft, LeCompton, Kan.....	6	6

## WOMEN

*Katie Gregson, Crestline, Calif.....	4	1
Gertsie Selby, Tulsa, Okla.....	4	1
Vicki Chapelle, Portland, Ore.....	4	1

\* Won title play-off. Gertsie Selby beat Vicki Chapelle for second place.

## JUNIOR

Byron Bowman, Murray, Utah.....	12	1
Roger Vogel, Manito, Ill.....	11	1
Rex Atwood, Murray, Utah.....	9	3
Sammie Somerhalder, Ruskin, Nebr.....	8	4

## MEN'S CLASS B

	W.	L.	T.
*Harry Dolan, California.....	10	1	1
Harry Page, Iowa.....	11	0	1

\* Won play-off.

## RINK OPERATORS CHAMPIONS

Source: Roller Skating Rink Operators Association of America.

## American

(At Denver, Colo., July 26-31)

## SINGLES

Men's senior—Arthur Kerwin, Seattle  
 Women's senior—Laurene Anselmy, Pontiac, Mich.  
 Men's intermediate—Edgar Watrous, Hartford, Conn.  
 Women's intermediate—Patricia Bowen, Seattle  
 Men's novice—Ronald Hadley, Tulsa, Okla.  
 Women's novice—Marilyn LaPorte, Greeley, Colo.  
 Junior boys—Kenneth Schaeffer, Brooklyn  
 Junior girls—Diane Guaraglia, San Leandro, Calif.

## FIGURE

Men's senior—William Pate, Jr., Pontiac, Mich.  
 Women's senior—Laurene Anselmy  
 Men's intermediate—Kenneth Schaeffer  
 Women's intermediate—Joan Brown, St. Louis  
 Men's novice—Ronald Hadley  
 Women's novice—Joann Hickmon, Chicago  
 Junior boys—Robert Lavery, Brockton, Mass.  
 Junior girls—Lynne Mathewson, San Leandro, Calif.

## PAIRS

Senior—Gary Houck-Marilee Olsen, Middletown, Ohio  
 Intermediate—Dick Deatsch-Nancy Curtis, Marysville, Calif.  
 Novice—Kenneth Trotter-Ruth Heesemann, Elmont, N. Y.  
 Junior—John Martin-Carolyn Sliger, Springfield, Mo.

## DANCE

Senior—Gary Castro-Marilyn Roberts, San Francisco  
 Intermediate—Joe Fanfa-Sharon Martin, San Leandro, Calif.  
 Novice—Lawrence Lovejoy-Joyce Lampert, San Francisco  
 Junior—Jack George-Sandra Brown, Oklahoma City

## FOURS

Senior—Middletown, Ohio (Robert Clary, Marilee Olsen, Gary Houck, Frances Reher)  
 Intermediate—Long Beach, Calif. (Michael Glatz, Patricia Pennington, Anthony Sakowicz, Gwenn Hess)

## SPEED

Men's senior—Richard Waltz, North Sacramento, Calif.  
 Women's senior—Evalyn Olsen, Oakland, Calif.  
 Men's intermediate—Ralph Conrad, Riverview, N. J.  
 Women's intermediate—Marilyn Baker, Coffeyville, Kan.  
 Men's relay—North Sacramento, Calif. (Richard Waltz, David Games, Jack Holley, Jimmy Fish, Ken Dotson)  
 Women's relay—Denver (Connie Douglas, Phyllis Arp, Diane Dickey, Patricia O'Brien)  
 Mixed relay—Oakland, Calif. (Al Jansson, Barbara Major, Ray Dalton, Evalyn Olsen)

## Boxer Best in Junior Class

George Alston's boxer Champion Barmere's Talisman took the chief award in the Leonard Brumby Junior Showmanship Class at the Westminster Kennel Club show in 1954. Sally Tillet's Ch. Dal-Let, a beagle, was second and Brian Tormey's Kerry blue terrier Ch. Marberlane third. Fourth place went to John Little's beagle Johnnie's Spot.

## JUNIOR BASEBALL CHAMPIONS

Babe Ruth League—Stamford, Conn.  
 P-O-N-Y League—Monongahela, Pa.  
 Little League—Schenectady, N. Y.  
 American Legion—San Diego (Calif.) Post No. 492

## FLY AND BAIT CASTING

Source: L. S. Williams, Executive Secretary, National Association of Angling and Casting Clubs.

### National Championships

(At Long Beach, Calif., Aug. 18-22)

All-around—Jon Tarantino, San Francisco

#### Official Combined Champions

Distance baits—Richard R. Ward, Washington, D. C.	2218 ft.
Distance flies—Jon Tarantino	1114 ft.
Accuracy baits—Warren Rector, Oklahoma City	195 pts.
Accuracy flies—Donald Meyer, Burbank, Calif.	200 pts.
All-distance—Jon Tarantino	3300 ft.
All-accuracy—Marion Garber, Toledo	394 pts.

#### WOMEN

Accuracy baits—Mildred Wolfe, Long Beach, Calif.	192 pts.
Accuracy flies—Lois Myers, Long Beach, Calif.	191 pts.
All-accuracy—Mildred Wolfe	379 pts.

#### INTERMEDIATE

Accuracy baits—Warren Grinel, Los Angeles	190 pts.
Accuracy flies—Billy Peters, Toledo	198 pts.
All-accuracy—Billy Peters	386 pts.

#### Official Distance Events

	Avg. feet	Long cast
3/8-oz. bait—Jon Tarantino	340	351
5/8-oz. bait—Richard R. Ward	405	411
Trout fly—Jack Crossfield, San Francisco	186 1/3	194
Salmon fly—Myron C. Gregory, San Francisco	198 2/3	200

#### Official Accuracy Events

	Pts.
Dry fly—Donald Meyer	100
Wet fly—Jon Tarantino	100
3/8-oz. bait—Marion Garber	99
5/8-oz. bait—Warren Rector, Oklahoma City	98

#### WOMEN

Dry fly—Kay Brodney, San Francisco	97
Wet fly—Mildred Wolfe	98
3/8-oz. accuracy—Mildred Wolfe	93
5/8-oz. accuracy—Mildred Wolfe	99

#### INTERMEDIATE

Dry fly—Billy Peters	98
Wet fly—Delno Huff, Los Angeles	100
3/8-oz. bait—Billy Peters	95
5/8-oz. bait—Warren Grinel	97

#### JUNIOR

5/8-oz. bait—Jerry Hunt, Los Angeles	93
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#### Skish Events

Accuracy fly—John Dieckmann, Costa Mesa, Calif.	92 pts.
Accuracy bait—Marion Garber	78 pts.
Distance fly—Ben Fontaine, New Orleans	144 1/3 avg., 171 long cast
Distance bait—Jon Tarantino	259 1/3 avg., 260 long cast
Women's accuracy fly—Mildred Wolfe	78 pts.
Women's accuracy bait—Norma Collins, Long Beach, Calif.	50 pts.
Junior accuracy fly—Paul Rhodes, Los Angeles	88 pts.
Junior accuracy bait—Warren Grinel	74 pts.

#### Skish Combined Champions

All-around—Jon Tarantino	11 pts.
Accuracy—Marion Garber	164 pts.
Distance—Jon Tarantino	1189 ft.
Women's accuracy—Norma Collins	123 pts.
Junior accuracy—Warren Grinel	154 pts.

John L. Isacs, 14, of Bridgeport, Conn., landed a 720-pound bluefin tuna off Nebraska Shoals, near Green Hill, R. I., on Aug. 17, 1954. He caught the fish with rod and reel and a 39-thread line.

## SKEET SHOOTING

Source: George W. White, Manager, National Skeet Shooting Association.

### National Championships

(At Waterford, Mich., Aug. 30-Sept. 5)

Open high-over-all—Col. Salvador T. Roig, San Juan, Puerto Rico	535 x 550
All gauge open—Howard F. Confer, Detroit	249 x 250
All gauge civilian—Howard F. Confer	249 x 250
All gauge military—T/Sgt. Glenn W. Van Buren, Garawell AFB	248 x 250
Intercollegiate—Benjamin Dilorio, Jr., Utica, N. Y. (Wesleyan)	245 x 250
20 gauge open—Mrs. Leon Mandel, Chicago	100 x 100
Small gauge—Col. Salvador T. Roig	100 x 100
Sub-small gauge (410)—Lewis Gordon, Texarkana, Ark.	95 x 100
Champion of champions—Col. Salvador T. Roig	100 x 100
Eastern open—W. G. Tomlinson, Detroit	100 x 100
Western open—Andy Laird, Stockton, Calif.	100 x 100
Guns handicap—Igor Pezas, New York	98 x 100
Veteran (over 70)—S. H. Gripp, Houston, Tex.	236 x 250
All gauge 2-man—T. H. Mettler, Bakersfield, Calif.—Alex H. Kerr, Beverly Hills, Calif.	495 x 500
20 gauge 2-man—Mickey Michaelis, George A. Morin, Strategic Air Command	199 x 200
Small gauge 2-man—Carl Helton, Niagara Falls, N. Y.—Benjamin Dilorio	197 x 200
Sub-small gauge 2-man—Russell Marks, El Dorado, Ark.—Lewis Gordon	188 x 200
Husband and wife—Mr. and Mrs. W. L. O'Brien, Montreal	477 x 500
Parent and child—C. A. McDowell, Sr.—C. A. McDowell, Jr., Shreveport, La.	487 x 500
Civilian 5-man—Michigan Wreckers, Detroit (Hamp Curry, W. G. Tomlinson, Howard F. Confer, John Jenkins, C. J. Crites)	1221 x 1250
Military 5-man—NAS, Jacksonville, Fla. (K. L. Pendergast, W. L. Arthur, Titus H. Harris, Jr., Joe Hayman, F. L. Smith)	1221 x 1250

#### WOMEN

High-over-all—Mrs. Leon Mandel, Chicago	522 x 550
All gauge—Mrs. Leon Mandel	247 x 250
20 gauge—Mrs. Leon Mandel	100 x 100
Small gauge—Mrs. Ethel Balch, Tulsa, Okla.	94 x 100
Sub-small gauge—Mrs. Leon Mandel	86 x 100
Junior all gauge—Gail Williamson, Pittsburgh	86 x 100

#### SENIOR

High-over-all—Ed Docherty, Holyoke, Mass.	513 x 550
All gauge—Joseph M. George, Sudersville, Md.	242 x 250
20 gauge—Andy Clausen, Berkeley, Calif.	96 x 100
Small gauge—Carl B. Stutzman, Peoria, Ill.	95 x 100
Sub-small gauge—Ed Docherty	85 x 100

#### JUNIOR

High-over-all—George H. Hodges, Jr., Jacksonville, Fla.	524 x 550
All gauge—Charles Prentiss, Jr., Fabens, Tex.	245 x 250
20 gauge—George H. Hodges, Jr.	100 x 100
Small gauge—Edward Harris, Galveston, Tex.	97 x 100
Sub-small gauge—Jay Swardenski, Peoria, Ill.	88 x 100
Sub-junior all gauge—Nicky Mallas, Pacoma, Calif.	96 x 100

#### INDUSTRY

High-over-all—George F. Heaney, Indianapolis	526 x 550
All gauge—Fred Missildine, Sea Island, Ga.	248 x 250
20 gauge—J. V. Eliot, Jr., Newport Beach, Calif.	100 x 100
Small gauge—Fred Missildine	97 x 100



## RIFLE AND PISTOL SHOOTING

Source: Paul B. Cardinal, Public Relations, National Rifle Association of America.

## National Champions

## OUTDOOR

## Rifle

	Score
Small-bore—Alonzo B. Wood, Elbridge, N. Y.....	3193
High-power (N.R.A. match rifle)—First Lt. Clifford Tryon, U. S. M. C.....	628-56V
High-power (M-1 service rifle)—CWO T. R. Carpenter, U. S. M. C.....	628-47V
Women's small-bore—Elinor Bell, Santa Ana, Calif.....	3186
Women's high-power—Helen Orme-Johnson, El Paso, Tex.....	601-37V
Junior small-bore—Presley Kendall, Louisville, Ky.....	3189
Junior high-power—Ron Haroldson, Seattle, Wash.....	597-22V

## Pistol

Men—Harry Reeves, Detroit, Mich.....	2587
Women—Lucile Chambliss, Winter Haven, Fla.....	2441

## NATIONAL TROPHY MATCHES

Individual rifle—Cpl. Edward F. Grimes, Jr., U. S. Army.....	243-22V
Team rifle—U. S. M. C. (Frank C. Stanopik, Burl Bevers, Robert W. Lowe, Roy F. Rice, Siegfried H. Kamrau, Robert J. Blackett).....	1407
Individual pistol—Maj. William Hancock, U. S. Army.....	285
Team pistol—U. S. Army (John Dodds, Forest R. Smith, Richard C. Amundsen, Ellis Lea).....	1108

## INDOOR

## Small-bore Rifle

Men—Verle F. Wright, Jr., Fort Wayne, Ind.....	795
Women—Virginia Mathes, Denver, Colo.....	781
Junior—Gordon Greeno, Aberdeen, Wash.....	194
Intercollegiate—Tao-Yuan Wu, California.....	295
Team—Minneapolis R. C. (Elmer Franzen, Emmet Swanson, Robert Sandager, Oswald Helseth).....	1566
Junior team—Kent League Junior R. C., Grand Rapids, Mich. (Paul Gogulski, Ron Insley, Jim Greenhoe, Russell Brown).....	754
Intercollegiate team—Maryland (James Wells, Elwood Barton, Robert Martorana, Linn Savage, Richard Gorey).....	1439

## Pistol

Men—Philip C. Roettinger, Alexandria, Va.....	869
Women—Gertrude E. Backstrom, Hoquiam, Wash.....	827
Team—Minneapolis P. C. (Donald Nelson, Anthony Hammel, Harry Levi, Emmet Swanson).....	1125

## POLO

## National Outdoor Champions

Open—C.C.C. (Detroit)—Meadow Brook (A. D. Beveridge, Paul Barry, Alan L. Corey, Jr., George H. Bostwick).....	
Monty Waterbury Cup—C.C.C.—Meadow Brook (A. D. Beveridge, G. H. Bostwick, Alan L. Corey, Jr., Harold Barry).....	
20-goal—Texas (A. D. Beveridge, Bert Beveridge, Harold Barry, Paul Barry).....	

## Indoor Champions

National senior—Squadron A, New York (Philip Iglehart, Al Parsells, Philip Brady).....	
National 12-goal—Long Island (Philip Iglehart, Walter Phillips, David Ellis).....	
National intercollegiate—New Mexico Military Institute (Buzz Easterling, Fred Rice, Jack Dean).....	
Sherman Memorial tournament—Huntington (Joseph Rizzo, Vincent Rizzo, Raymond Koch).....	

## CHESS

Source: American Chess Bulletin, New York.

## World Champions

Men—Mikhail Botvinnik, Leningrad, U.S.S.R.
Women—Mrs. Elizabeth Bykova, Moscow, U.S.S.R.
Junior—Oscar Panno, Buenos Aires, Argentina
Men's team (Hamilton-Russell Trophy)—U.S.S.R.

## United States

Men—Arthur B. Bisguier, New York
Women—Mona May Karff, New York
Men's Open—Larry Evans, New York
Women's Open—Mrs. Gisela K. Gresser, New York
Speed—James T. Sherwin, New York
Junior—Ross E. Siemms, Toronto

## Matches and Tournaments

World championship—Mikhail Botvinnik, Leningrad, and Vassily Smyslov, Moscow, played 12-12 (Botvinnik retained title)
Eastern States—Olaf Ulvestad, Seattle
Hastings International—C. H. O'D. Alexander, England, and David Bronstein, Moscow (tie), 6½-2½

Manhattan C. C. (N. Y.) championship—Arnold S. Denker, Far Rockaway, N. Y.

Marshall C. C. (N. Y.) championship—John W. Collins, New York

Metropolitan League championship—Manhattan C. C.

Mexico International—Dr. Edward Lasker, New York

National Intercollegiate individual—Albert Weissman, New York University

New Jersey Federation—Walter Shipman, New York

New York State championship—William Lombardy, New York

Pan-American—Arthur B. Bisguier

Saarbrücken International—Andrej Fuderer, Belgrade, Yugoslavia

South American Zonal—Oscar Panno

Soviet championship—Yuri Averbakh, Moscow

Team matches—U.S.S.R. 20, United States 12; U.S.S.R. 20½, Argentina 11½; U.S.S.R. 17½, Austria 2½; U.S.S.R. 18½, Great Britain 1½; U.S.S.R. 13, Sweden 3; U.S.S.R. 15, France 1.

## SOCCER

Source: Flannery News Service, New York.

World Cup—Germany beat Hungary, 3 to 2, in final

National Challenge Cup—New York Americans

National Amateur Cup—Beadling (Pa.) S. C.

American League—New York Americans

Lewis Cup—Newark (N. J.) S. C.

National Junior Cup—Hansa Juniors, Chicago

New York State Cup—Lithuanians, New York

Eastern District League—Maccabis, New York

German-American League—German-Hungarians, New York

Metropolitan League—Torino, New York

Metropolitan League Cup—Sada, New York

National League—Gjoa, New York

National League Cup—Danish, New York

New Jersey State League—Olden, Trenton

New York State Junior Cup—Danish

New York Juvenile Cup—New York

Boys' State Cup—Minerva, New York

Dr. Manning Cup—Greek-American Reserves, New York

## WATER SKIING

Source: American Water Ski Association.

## NATIONAL CHAMPIONSHIPS

(At Laconia, N. H., Aug. 13-15)

	Point
Men—Butch Rosenberg, Cypress Gardens, Fla.	1220
Women—Willia McGuire, Cypress Gardens, Fla.....	1205
Veterans—Jack Andresen, Greenwood Lake, N. Y.....	1205
Junior boys—Charles Emry, Cypress Gardens, Fla.....	1084
Junior girls—Connie Der, Cypress Gardens, Fla.....	1400
Mixed doubles—Bruce Parker, Amityville, N. Y.—Evelyn Wolford, Massapequa, N. Y....	—

## RECORDS

World jumping—106 feet, by Warren Witherell, The Weirs, N. H.

Long distance—24½ miles, by Lyle Lee and Jim Upton, Galetta III., downstream on Ohio River, July 4, 1953. The time was 12 hours 45 minutes.

## MAJOR LEAGUE RECORDS FOR 1954

## American League

## Final Standing of the Clubs

	Cleveland	New York	Chicago	Boston	Detroit	Washington	Baltimore	Philadelphia	Woon.	Los.	Percentage	Games Behind
Cleveland	—	11	11	20	14	18	19	18	111	43	.721	—
New York	11	—	15	13	16	13	17	18	103	51	.669	8
Chicago	11	7	—	17	12	15	15	17	94	60	.610	17
Boston	2	9	5	—	14	13	11	15	69	85	.448	42
Detroit	8	6	10	8	—	9	14	13	68	86	.442	43
Washington	4	9	7	9	13	—	12	12	66	88	.429	45
Baltimore	3	5	7	11	8	10	—	10	54	100	.351	57
Philadelphia	4	4	5	7	9	10	12	—	51	103	.331	60

## National League

## Final Standing of the Clubs

												Games Behind . . .
												Percentage . . . . .
												Lost . . . . .
												Won . . . . .
												Pittsburgh . . . . .
												Chicago . . . . .
												St. Louis . . . . .
												Cincinnati . . . . .
												Philadelphia . . . . .
												Milwaukee . . . . .
												Brooklyn . . . . .
												New York . . . . .
New York . . . . .	—	13	12	16	15	12	15	14	97	57	.630	—
Brooklyn . . . . .	9	—	10	13	16	14	15	15	92	62	.597	5
Milwaukee . . . . .	10	12	—	13	12	16	14	89	65	57.8	8	—
Philadelphia . . . . .	6	9	9	—	8	12	15	16	75	79	.487	22
Cincinnati . . . . .	7	6	10	14	—	8	14	15	74	80	.481	23
St. Louis . . . . .	10	8	10	10	14	—	8	12	72	82	.468	25
Chicago . . . . .	7	7	6	7	8	14	—	15	64	90	.416	33
Pittsburgh . . . . .	8	7	8	6	7	10	7	—	53	101	.344	44

## THE LEADERS

## American League

Batting—Bobby Avila, Cleveland	341
Runs batted in—Larry Doby, Cleveland	126
Hits—Nellie Fox, Chicago, and Harvey Kuenn, Detroit (tie)	201
Doubles—Mickey Vernon, Washington	33
Triples—Minnie Minoso, Chicago	18
Home runs—Larry Doby, Cleveland	32
Runs—Mickey Mantle, New York	129
Stolen bases—Jackie Jensen, Boston	22
Pitching—Sandy Consuegra, Chicago (W 16, L 3)	842
Strikeouts—Bob Turley, Baltimore	185

## National League

Batting—Willie Mays, New York	345
Runs batted in—Ted Kluszewski, Cincinnati	141
Hits—Don Mueller, New York	212
Doubles—Stan Musial, St. Louis	41
Triples—Willie Mays, New York	13
Home runs—Ted Kluszewski, Cincinnati	49
Runs—Duke Snider, Brooklyn, and Stan Musial, St. Louis (tie)	120
Stolen bases—Bill Bruton, Milwaukee	34
Pitching—Johnny Antonelli, New York (W 21, L 7), and Hoyt Wilhelm, New York (W 12, L 4)	750
Strikeouts—Robin Roberts, Philadelphia	185

## MINOR LEAGUE BASEBALL

## 1954 Pennant Winners

Asterisk indicates play-offs determine champions

## OPEN CLASSIFICATION

League and champion	Play-off winner
Pacific Coast—San Diego	Oakland

## CLASS AAA

American Assn.—Indianapolis	Louisville
International—Toronto	Syracuse

## CLASS AA

Southern Assn.—Atlanta	Atlanta
Texas—Shreveport	Houston*

## CLASS A

Eastern—Wilkes-Barre	Albany
South Atlantic—Jacksonville	Savannah
Western—Denver	Des Moines
Western Int'l—Vancouver (1st half)	Vancouver
Lewiston (2d half)	Vancouver

## CLASS B

Big State—Waco	Waco*
Caroline—Fayetteville	Fayetteville
Piedmont—Norfolk	Newport News
Three-I—Evansville	Quincy
Tri-State—Asheville	Knoxville

## CLASS C

Arizona-Texas—Phoenix	No play-offs
California—Modesto	Modesto
Cotton States—Greenville	El Dorado
Evangeline—New Iberia	New Iberia
Longhorn—Artesia	Artesia*
Northern—Fargo-Moorhead	Fargo-Moorhead
Pioneer—Salt Lake City	Great Falls
Provincial—Quebec	Quebec
Western Assn.—Topeka	Blackwell
West Texas-New Mexico—Pampa	Pampa

## CLASS D

Alabama-Florida—Dothan	Graceville
Appalachian—Bluefield	Bluefield
Florida State—Jacksonville Beach (1st half)	Lakeland
Lakeland (2d half)	Unfinished
Georgia-Florida—Brunswick	Vidalia
Georgia State—Vidalia	Vidalia
Kitty—Union City (1st half), Madisonville (2d half)	Union City
Miss.-Ohio Valley—Decatur	Danville
Pony—Corning	Corning
Sooner State—Shawnee	Lawton

† Final series was canceled, with Fitzgerald leading Brunswick, 3 games to 2.

## DIXIE SERIES

Atlanta (SA) beat Houston (TL), 4 games to 3.

## JUNIOR WORLD SERIES

Louisville (AAA) beat Syracuse (AAA), 4 games to 2

Joe Bauman of the Roswell Rockets of the Class C Longhorn League set a home-run record for organized baseball when he hit 72 during the 1954 season. The previous record was 69, set by Joe Hauser of the Minneapolis club in the American Association in 1933 and tied by Bob Crues of the Amarillo team in the West Texas-New Mexico League in 1948.

The Wichita (Kan.) Boeing Bombers became national semi-pro baseball champions for the second time when they defeated the Springfield (Mo.) Generals, 24-6, in the deciding game of the 1954 tourney. The Bombers captured their first National Baseball Congress title in 1942.

## Unofficial Averages

Source: Elias Baseball Bureau, New York

## AMERICAN LEAGUE

## Individual Batting

	g	ab	r	h	hr	rbi	avg.
Williams, Boston.....	117	386	93	133	29	89	.344
Avila, Cleveland.....	143	556	113	189	15	67	.341
Skowron, New York.....	87	215	37	73	7	41	.340
Minoso, Chicago.....	153	568	119	182	19	115	.320
Fox, Chicago.....	155	631	111	201	2	46	.319
Noren, New York.....	125	426	70	136	12	66	.319
Cavarretta, Chicago.....	71	157	21	50	3	24	.318
Berra, New York.....	151	584	88	179	22	125	.307
Kuenn, Detroit.....	155	656	81	201	5	48	.306
Boone, Chicago.....	92	99	21	30	0	4	.306
Goodman, Boston.....	127	489	71	148	1	36	.303
Fain, Chicago.....	65	235	30	71	5	51	.302
Carey, New York.....	122	412	60	124	8	65	.301
Mantle, New York.....	146	543	129	168	27	102	.300
Finigan, Philadelphia.....	136	487	67	146	7	50	.300
Rosen, Cleveland.....	137	456	75	140	24	102	.300
Busby, Washington.....	155	628	83	187	7	79	.298
Boone, Detroit.....	148	548	77	160	20	84	.295
Bauer, New York.....	115	378	73	111	12	54	.294
Hatfield, Detroit.....	81	218	31	64	2	25	.294
Pope, Cleveland.....	60	102	21	30	4	12	.294
Abrams, Baltimore.....	115	423	67	124	6	25	.293
Vernon, Washington.....	151	597	90	173	20	97	.290
Fitzgerald, Washington.....	115	360	33	104	4	40	.289
Rivera, Chicago.....	145	590	62	140	13	61	.288
Wiersall, Boston.....	133	473	77	135	8	37	.285
Stephens, Baltimore.....	101	355	32	104	8	46	.285
White, Boston.....	156	489	46	139	14	75	.284
Waitkus, Baltimore.....	95	311	35	88	2	32	.283
Mitchell, Cleveland.....	63	60	6	17	1	6	.283
Smith, Cleveland.....	131	481	101	135	11	49	.281
Dropo, Detroit.....	107	320	26	90	4	44	.281
Majeski, Cleveland.....	57	121	9	34	3	7	.281
Caton, Baltimore.....	93	274	77	135	2	24	.271
Jensen, Boston.....	152	580	92	160	25	117	.276
Kell, Boston-Chicago.....	96	326	39	90	5	58	.276
Kaline, Detroit.....	138	505	44	139	4	43	.275
Groth, Chicago.....	125	422	41	116	7	60	.275
Courtney, Baltimore.....	122	396	25	109	4	38	.275
Wilson, Chicago-Detroit.....	62	190	24	52	3	23	.274
Doby, Cleveland.....	153	578	94	157	32	126	.272
Collins, New York.....	130	484	68	97	12	44	.271
Chapman, Boston.....	112	332	43	93	6	35	.271
Runnels, Washington.....	139	488	76	131	3	56	.268
Mele, Baltimore-Boston.....	114	362	39	97	12	55	.268
Tuttle, Detroit.....	147	530	64	141	7	58	.266
Brideweser, Baltimore.....	73	203	18	54	0	12	.266
Dente, Cleveland.....	68	169	17	45	1	19	.266
Westlake, Cleveland.....	84	240	36	63	11	41	.263
Michaels, Chicago.....	91	282	37	74	4	24	.262
Hiers, Detroit.....	91	252	24	66	8	35	.262
Robinson, New York.....	85	142	11	37	3	27	.261
Kryhoski, Baltimore.....	100	300	32	78	1	33	.260
Olson, Boston.....	101	227	25	59	1	19	.260
Cerv, New York.....	56	100	13	26	5	13	.260
McDougal, New York.....	126	394	67	102	12	48	.259
Jacobs, Philadelphia.....	132	508	60	131	0	26	.258
Diering, Baltimore.....	128	418	35	103	8	58	.258
Yost, Washington.....	125	538	103	138	11	47	.257
Lepio, Boston.....	116	398	42	102	8	45	.256
Wertz, Balt.-Cleve.....	123	390	38	100	15	61	.256
Vollmer, Washington.....	61	117	8	30	2	15	.256
Carrasquel, Chicago.....	155	620	104	158	12	62	.255
Power, Philadelphia.....	127	462	36	118	8	38	.255
Agganis, Boston.....	132	434	54	109	11	57	.251
Kennedy, Cleve.-Balt.....	110	323	36	81	6	45	.251
Glynn, Cleveland.....	111	371	19	43	9	15	.251
Holmes, Detroit.....	114	352	35	88	9	38	.250
Zerni, Philadelphia.....	97	336	42	84	14	62	.250
Wooling, New York.....	97	304	33	76	3	39	.250
Regala Jr., Cleveland.....	65	180	21	45	2	24	.250
Slaughter, New York.....	68	124	19	31	1	19	.250
Miranda, New York.....	92	116	12	29	1	12	.250
Maxwell, Boston.....	74	104	9	26	0	5	.250
Deising, Detroit.....	122	371	37	92	6	37	.248
Bolling, Boston.....	113	371	42	92	6	38	.248
Felley, Baltimore.....	85	239	25	59	4	36	.247
Pesky, Det.-Wash.....	69	175	22	43	1	10	.246
Wright, Washington.....	76	171	13	42	1	17	.246
Young, Baltimore.....	129	431	43	105	4	23	.244

## NATIONAL LEAGUE

## Individual Batting

	g	ab	r	h	hr	rbi	avg.
Burgess, Philadelphia.....	108	345	41	127	4	46	.368
Mays, New York.....	151	565	119	195	41	110	.345
Mueller, New York.....	153	619	89	212	4	70	.342
Snider, Brooklyn.....	149	584	120	199	40	130	.341
Rhodes, New York.....	82	164	31	62	15	50	.341
Musial, St. Louis.....	153	591	120	195	35	125	.330
Kluszewske, Cincinnati.....	149	573	104	187	49	141	.325
Schoendienst, St. Louis.....	148	610	98	192	5	79	.315
Ashburn, Philadelphia.....	153	569	111	175	1	51	.313
Robinson, Brooklyn.....	124	385	63	120	15	59	.311
Adcock, Milwaukee.....	141	554	98	171	10	68	.309
Reese, Brooklyn.....	133	500	72	154	23	66	.309
Temple, Cincinnati.....	146	505	60	155	9	42	.307
Gordon, Pittsburgh.....	131	363	38	111	12	49	.306
Moon, St. Louis.....	151	635	106	193	12	76	.304
Hodges, Brooklyn.....	154	579	106	176	42	130	.304
Shepard, Pittsburgh.....	82	228	24	69	3	23	.303
Baumholtz, Chicago.....	90	301	38	91	4	28	.302
Cooper, Pitts.-Chic.....	122	380	40	114	9	70	.300
Sarni, St. Louis.....	122	380	40	114	9	70	.300
Hemus, St. Louis.....	123	213	43	64	2	26	.300
Hammer, Philadelphia.....	152	596	83	178	13	89	.299
Frazier, St. Louis.....	80	87	8	26	3	18	.299
Bell, Cincinnati.....	153	620	104	185	17	101	.298
Thomas, Pittsburgh.....	153	577	81	172	23	93	.298
Johnson, St. Louis.....	152	611	81	181	12	104	.296
Furillo, Brooklyn.....	150	547	58	162	19	95	.294
Dark, New York.....	154	644	93	189	20	102	.294
Mathews, Milwaukee.....	138	476	96	138	40	103	.290
Lopata, Philadelphia.....	86	259	42	75	13	41	.290
Sauer, Chicago.....	142	519	99	150	41	103	.289
Atwell, Pittsburgh.....	96	287	36	83	3	26	.289
Pafko, Milwaukee.....	138	510	61	146	14	69	.286
Fondy, Chicago.....	141	558	77	162	9	48	.285
Kiner, Chicago.....	140	558	89	161	4	70	.285
Bruton, Milwaukee.....	142	566	90	161	4	80	.284
Cunningham, St. Louis.....	152	610	39	88	11	50	.284
Repulski, St. Louis.....	152	618	99	175	19	79	.283
Schell, Philadelphia.....	92	272	25	77	7	33	.283
Gilliam, Brooklyn.....	146	607	107	171	13	53	.282
Aaron, Milwaukee.....	121	467	58	131	13	70	.281
Greengrass, Cincinnati.....	131	542	79	152	27	95	.280
Garagiola, Chic.-N. Y.....	88	164	17	46	5	28	.280
O'Connell, Milwaukee.....	146	541	61	151	2	53	.279
Logan, Milwaukee.....	154	661	66	154	8	67	.275
Baker, Chicago.....	135	541	68	149	13	60	.275
Amoros, Brooklyn.....	79	263	44	72	9	34	.274
Metcovich, Milwaukee.....	68	124	7	34	1	15	.274
Banks, Chicago.....	154	593	69	162	19	80	.273
Jackson, Chicago.....	126	484	77	132	19	67	.273
Torgerson, Philadelphia.....	95	490	63	133	5	54	.271
Cole, Pittsburgh.....	138	486	40	131	1	39	.270
Ward, Pittsburgh.....	117	310	37	97	7	47	.270
Jones, Philadelphia.....	142	540	63	145	12	54	.269
Merriman, Cincinnati.....	73	112	12	30	0	16	.268
Adams, Cincinnati.....	109	389	68	104	3	23	.267
Borkowski, Cincinnati.....	72	161	13	43	1	19	.267
Grammas, St. Louis.....	142	401	57	106	2	29	.264
Thompson, New York.....	136	448	76	118	26	87	.264
Morgan, Philadelphia.....	135	455	58	119	14	50	.262
Irvin, New York.....	135	432	62	113	19	64	.262
Ennis, Philadelphia.....	145	556	73	145	25	119	.261
Post, Cincinnati.....	129	448	46	115	18	83	.257
Rice, St. Louis.....	56	148	13	38	2	16	.257
Katt, New York.....	96	199	26	51	9	33	.256
Lockman, New York.....	148	570	74	143	10	60	.251
McMillan, Cincinnati.....	134	588	87	147	4	42	.250
Skinner, Pittsburgh.....	132	470	67	117	8	47	.249
Alston, St. Louis.....	66	244	28	60	4	34	.246
Hoak, Brooklyn.....	88	251	40	64	7	26	.245
Dittmer, Milwaukee.....	66	192	22	47	6	20	.245
Grandall, Milwaukee.....	138	463	60	112	21	64	.242
Talbot, Chicago.....	114	403	45	97	1	19	.241
Harmon, Cincinnati.....	94	286	39	69	2	25	.241
Lynch, Pittsburgh.....	98	282	37	68	8	36	.241
Hall, Pittsburgh.....	112	312	38	75	2	27	.240
Clark, Philadelphia.....	82	233	26	56	1	24	.240
Wyrostek, Philadelphia.....	92	259	28	62	9	28	.233

## Club Batting

	g	r	h	hr	rbi	sb	avg.	was shut out
New York.....	155	805	1400	134	742	33	.268	9
Chicago.....	155	711	1382	94	656	92	.267	7
Boston.....	156	700	1436	123	655	51	.266	12
Cleveland.....	155	746	1367	156	712	33	.262	5
Detroit.....	156	584	1351	90	550	45	.258	10
Baltimore.....	154	483	1309	152	447	31	.255	14
Washington.....	155	631	1291	77	590	32	.246	14
Philadelphia.....	156	642	1227	94	502	29	.235	13

	g	r	h	hr	rbi	sb	avg.	was shut out
St. Louis.....	153*	799	1518	119	752	63	.281	6
Brooklyn.....	154*	778	1418	186	738	43	.281	6
Pittsburgh.....	153*	654	1389	102	619	30	.267	16
Philadelphia.....	154	670	1395	139	632	53	.265	8
New York.....	154	732	1386	186	701	29	.264	7
Chicago.....	154	700	1410	159	629	46	.263	11
Cincinnati.....	154	732	1369	147	686	46	.262	9



## AMERICAN LEAGUE

## Pitching Records

	g	lp	h	bb	so	w	l	pet.
Messl, Cleveland.....	40	33	56	39	54	6	1	.857
Consuegra, Chicago.....	39	154	143	35	31	16	3	.842
Feller, Cleveland.....	19	140	127	39	59	13	3	.813
McDonald, New York.....	16	71	54	45	20	4	1	.800
Newhouser, Cleveland.....	26	47	34	24	24	7	2	.778
Grim, New York.....	37	200	175	84	105	20	6	.769
Lemon, Cleveland.....	36	259	228	93	110	23	7	.767
Reynolds, New York.....	35	152	133	66	99	13	7	.765
Leapt, New York.....	26	170	189	33	131	12	4	.750
Garcia, Cleveland.....	45	259	220	70	131	19	8	.704
Morgan, New York.....	32	143	148	41	33	11	5	.688
Houtteman, Cleveland.....	32	188	198	56	68	16	7	.682
Wynn, Cleveland.....	40	271	225	83	158	23	11	.676
Ford, New York.....	34	211	170	101	126	16	8	.667
Stuart, Balt.-N. Y.....	32	56	73	25	15	4	2	.667
Keegan, Chicago.....	31	211	211	82	61	16	9	.640
Harshman, Chicago.....	35	174	158	96	134	14	8	.636
Kemmerer, Boston.....	19	75	70	41	37	5	3	.625
Trucks, Chicago.....	40	285	224	95	162	19	12	.613
Dorish, Chicago.....	37	109	88	29	46	6	4	.600
Schmiltz, Washington.....	29	185	176	63	56	11	8	.579
Branda, Det.-N. Y.....	22	58	72	43	22	4	3	.571
Garver, Detroit.....	35	132	131	43	52	9	9	.563
Sullivan, Boston.....	35	246	216	62	93	14	11	.560
Burtschy, Philadelphia.....	46	206	184	66	125	15	12	.556
Maricwa, Detroit.....	38	83	76	40	39	5	4	.556
Stone, Washington.....	31	179	161	69	85	12	10	.545
Johnson, Chicago.....	46	144	128	43	67	7	7	.533
Burdek, Detroit.....	33	253	235	57	101	18	15	.529
Brower, Boston.....	33	163	152	95	70	10	9	.526
Stobbs, Washington.....	31	182	188	67	68	11	11	.500
Kinder, Boston.....	48	107	107	36	67	8	8	.500
Sain, New York.....	45	77	66	15	34	6	6	.500
Narleski, Cleveland.....	42	89	61	44	53	3	3	.500
Turley, Baltimore.....	35	247	173	190	185	14	15	.483
Nixon, Boston.....	31	200	192	67	102	12	12	.478
Bride, Chicago.....	36	190	179	86	145	9	10	.474
Martin, Phila.-Chic.....	48	123	110	43	54	7	8	.467
Trice, Philadelphia.....	49	119	118	48	22	7	8	.467
Porterfield, Wash.....	32	244	248	75	83	13	15	.464
Coleman, Baltimore.....	33	221	184	95	102	13	17	.433
Hudson, Boston.....	33	71	83	30	27	3	4	.429
Pilleto, Baltimore.....	25	179	158	67	64	10	14	.417
Chakales, Cleve.-Balt.....	42	35	56	10	7	1	7	.417
Duvorink, Detroit.....	35	203	201	62	70	9	13	.409
Zixon, Wash.-Phila.....	54	138	162	40	48	6	9	.400
Bishop, Philadelphia.....	20	95	97	49	34	4	6	.400

## 1954 ALL-STAR GAME

(At Municipal Stadium, Cleveland, July 13)

## NATIONAL LEAGUE

Manager—Walter Alston, Brooklyn Dodgers

	ab	r	h	do	a	e
Hamner, 2b.....	3	0	0	0	0	0
Schoendienst, 2b.....	3	0	0	0	0	0
Dark, ss.....	5	0	1	1	2	0
Snider, cf, rf.....	4	2	3	2	0	0
Mustaf, rf, lf.....	5	1	2	2	1	0
Kluszewski, lb.....	4	2	2	5	0	0
Hodges, lb.....	1	0	0	1	0	0
Jablonski, 3b.....	3	1	1	0	1	0
Jackson, 3b.....	2	0	1	1	1	0
Robinson, lf.....	4	1	1	1	0	1
Mays, cf.....	2	1	1	1	0	0
Campanella, c.....	3	1	1	9	0	0
Burgess, c.....	1	0	0	1	0	0
Roberts, p.....	1	0	0	0	0	0
aMueller.....	1	0	1	0	0	0
Antonelli, p.....	0	0	0	0	0	0
cThomas.....	0	0	0	0	0	0
Spahn, p.....	0	0	0	0	0	0
Grissom, p.....	0	0	0	0	0	0
cBell.....	1	1	1	0	0	0
Conley, p.....	0	0	0	0	0	0
Erskine, p.....	0	0	0	0	0	0
Total.....	40	9	14	24	5	0

aDoubled for Roberts in fourth. bStruck out for Antonelli in fifth. cStruck out for Porterfield in seventh. cHit homer for Grissom in eighth. fHit homer for Stone in eighth. gStruck out for Boone in eighth.

National League..... 0 0 0 5 2 0 0 2 0—9  
American League..... 0 0 4 1 2 1 0 3 x—11

Runs batted in—Rosen 5, Boone, Avila 2, Doby, Fox 2, Kluszewski 3, Jablonski, Robinson 2, Mueller, Bell 2.

Two-base hits—Robinson, Mueller, Snider. Home runs—Rosen 2, Boone, Kluszewski, Bell, Doby. Sacrifice fly—Avila. Double play—Avila, Carrasquel and Rosen. Left on base—National 6, American 9. Bases on balls—Off Roberts 2, Spahn, Conley, Ford,

## NATIONAL LEAGUE

## Pitching Records

	g	lp	h	bb	so	w	l	pet.
Wilson, Milwaukee.....	27	128	129	36	52	8	2	.800
Antonelli, New York.....	39	258	209	95	148	21	7	.750
Wilhelm, New York.....	67	111	77	62	69	12	4	.750
Loos, Brooklyn.....	28	148	155	60	97	13	6	.722
Lawrence, St. Louis.....	35	161	141	68	72	16	6	.714
E. Johnson, Milwaukee.....	40	98	77	34	65	5	7	.714
Milliken, Brooklyn.....	24	63	58	18	22	5	2	.714
Nuzhalki, Cincinnati.....	35	166	188	59	85	12	6	.706
Maglie, New York.....	34	218	222	70	117	14	6	.700
Collum, Cincinnati.....	36	78	86	32	28	7	3	.700
Liddle, New York.....	28	126	100	55	44	9	4	.692
Hughes, Brooklyn.....	60	87	76	42	58	8	4	.667
Gomez, New York.....	37	222	202	102	117	9	9	.654
Mayer, Brooklyn.....	36	180	193	51	70	11	6	.647
Jolly, Milwaukee.....	47	114	87	62	61	11	6	.647
Spahn, Milwaukee.....	39	283	262	86	134	21	12	.636
Podres, Brooklyn.....	29	152	147	53	78	11	7	.611
Davis, Chicago.....	46	128	115	50	56	11	7	.611
Conley, Milwaukee.....	28	194	171	76	113	14	9	.609
Roberts, Philadelphia.....	45	337	288	56	185	23	15	.605
Grissom, New York.....	56	123	102	60	61	10	9	.588
Haddix, St. Louis.....	43	260	247	77	181	18	13	.581
Brazle, St. Louis.....	68	84	93	24	30	5	4	.556
Drews, Phila.-Cinc.....	30	76	97	26	34	5	4	.556
Erskine, Brooklyn.....	38	260	239	91	166	18	15	.545
Fowler, Cincinnati.....	40	228	256	83	92	10	10	.545
Labine, Brooklyn.....	47	109	101	56	40	7	6	.538
Newcombe, Brooklyn.....	29	144	158	48	81	8	8	.529
Valentine, Cincinnati.....	36	182	162	71	12	11	7	.522
Burdette, Milwaukee.....	32	238	224	62	79	15	14	.517
Minnor, Chicago.....	38	218	236	50	77	11	11	.500
Hearn, New York.....	29	130	137	66	45	8	8	.500
Baczewski, Cincinnati.....	29	131	159	51	43	6	6	.500
Hetki, Pittsburgh.....	58	84	102	32	24	4	4	.500
Jones, St. Louis.....	11	81	78	19	48	4	4	.500
Palica, Brooklyn.....	25	68	71	31	25	3	3	.500
Simmons, Philadelphia.....	34	254	226	98	126	14	15	.483
Wohmel, Cincinnati.....	37	171	153	72	62	10	11	.476
Littlefield, Pittsburgh.....	23	155	140	84	91	10	11	.476
Raschi, St. Louis.....	30	178	180	74	71	8	9	.471
Ruff, Chicago.....	34	235	213	101	124	13	15	.464
Jeffercoat, Chicago.....	42	99	98	56	35	5	6	.455
Nichols, Milwaukee.....	35	122	132	65	55	9	11	.450
Pollet, Chicago.....	20	132	125	54	56	8	10	.444
Rozik, Philadelphia.....	35	81	72	47	45	5	4	.444
Muller, Philadelphia.....	30	150	176	39	42	7	9	.438
Roe, Brooklyn.....	15	63	69	23	32	3	3	.438
Poholsky, St. Louis.....	25	105	101	21	53	5	7	.417

Manager—Casey Stengel, New York Yankees

	ab	r	h	do	a	e
Pinoso, lf, rf.....	4	1	2	1	0	1
Pineda, cf.....	0	0	0	0	0	0
Avila, 2b.....	3	1	3	1	1	0
Keegan, p.....	0	0	0	0	0	0
Stone, p.....	0	0	0	0	0	1
fDoby, cf.....	1	1	1	0	0	0
Trucks, p.....	0	0	0	0	0	0
Mantle, cf.....	5	1	2	2	0	0
Berra, c.....	4	2	2	5	0	0
Rosen, 3b, 3b.....	4	2	3	7	0	0
Boone, 3b.....	1	1	1	1	0	0
cVernon, lb.....	1	0	0	1	0	0
Bauer, rf.....	2	0	1	1	0	0
Porterfield, p.....	1	0	0	0	0	0
dFox, 2b.....	2	0	1	1	0	0
Carrasquel, ss.....	5	1	1	5	0	0
Ford, p.....	1	0	0	0	0	0
Consuegra, p.....	0	0	0	0	0	0
Cemon, p.....	0	0	0	0	0	0
bWilliams, lf.....	2	1	0	2	0	0
Noren, lf.....	0	0	0	0	0	0
Total.....	39	11	17	27	9	1

Trucks. Struck out—By Roberts 5, Antonelli 2, Grissom 2, Erskine 1, Porterfield 1.

Hits—Off Ford 1 in 3 innings, Consuegra 5 in 1/3, Lemon 1 in 2/3, Porterfield 4 in 3, Keegan 3 in 2/3, Stone 0 in 1/3, Trucks 0 in 1, Roberts 5 in 1/3, Antonelli 4 in 2, Spahn 4 in 2/3, Grissom 0 in 1/3, Conley 3 in 2/3, Erskine 1 in 2/3. Runs and earned runs—Off Roberts 4 and 4, Antonelli 3 and 3, Spahn 1 and 1, Conley 3 and 3, Consuegra 5 and 5, Porterfield 2 and 2, Keegan 2 and 2. Winning pitcher—Stone. Losing pitcher—Conley.

Umpires—Rommel (A.), plate and third base; Ballanfant (N.), first base; Honochick (A.), second base; Stewart (N.), third base and plate; Gorman (N.), left field; Paparella (A.), right field. Time—3:10. Attendance—68,751. Receipts—\$259,204.

## BASEBALL

## 1954 World Series Statistics

## Composite Box Score

## NEW YORK NATIONALS

## CLEVELAND AMERICANS

	BATS	G	AB	R	H	2B	3B	HR	RBI	BAT. AVG.
Lockman, 1b.....	L	4	18	2	2	0	0	0	0	.111
Dark, ss.....	R	4	17	2	7	0	0	0	0	.412
Mueller, rf.....	L	4	18	4	7	0	0	0	1	.389
Mays, cf.....	R	4	14	4	4	1	0	0	3	.286
Thompson, 3b.....	L	4	11	6	4	1	0	2	2	.364
Irvin, lf.....	R	4	9	2	1	0	0	2	2	.222
*Rhodes, lf.....	L	3	6	2	4	0	0	0	7	.667
Williams, 2b.....	R	4	11	0	0	0	0	0	1	.000
Westrum, c.....	R	4	11	0	3	0	0	0	3	.273
Maglie, p.....	R	1	3	0	0	0	0	0	0	.000
Liddle, p.....	R	2	3	0	0	0	0	0	0	.000
Grissom, p.....	L	1	1	0	0	0	0	0	0	.000
Antonelli, p.....	R	2	3	0	0	0	0	0	1	.000
Gomez, p.....	L	1	4	0	0	0	0	0	0	.000
Wilhelm, p.....	R	2	1	0	0	0	0	0	0	.000
Totals.....			130	21	33	3	0	2	20	.254

	BATS	G	AB	R	H	2B	3B	HR	RBI	BAT. AVG.
Smith, lf.....	R	4	14	2	3	0	0	1	2	.214
Avila, 2b.....	L	4	15	1	2	0	0	0	0	.133
Doby, cf.....	R	4	16	0	2	0	0	0	0	.125
Rosen, 3b.....	R	3	12	0	3	0	0	0	0	.250
Wertz, 1b.....	L	4	16	2	8	2	1	1	3	.500
*Regalado, 3b.....	R	4	3	0	1	0	0	0	0	.333
Grasso, c.....	R	1	0	0	0	0	0	0	0	.000
*Phillely, rf.....	L-R	4	8	0	1	0	0	0	0	.125
*Majeski, 3b.....	R	4	6	1	1	0	0	1	3	.167
*Mitchell.....	R	3	2	0	0	0	0	0	0	.000
Westlake, rf.....	R	2	7	0	1	0	0	0	0	.143
Dente, ss.....	R	3	3	1	0	0	0	0	0	.000
Strickland, ss.....	R	3	9	0	0	0	0	0	0	.000
*Pope, rf-lf.....	L	3	3	0	0	0	0	0	0	.000
Hegan, c.....	R	4	13	1	2	1	0	0	0	.154
*Glynn, 1b.....	L	2	2	1	1	1	0	0	0	.500
Naragon, c.....	L	1	0	0	0	0	0	0	0	.000
*Lemon, p.....	L	3	6	0	0	0	0	0	0	.000
Wynn, p.....	L-R	1	2	0	1	1	0	0	0	.500
Mossi, p.....	L	3	0	0	0	0	0	0	0	.000
Garcia, p.....	R	3	0	0	0	0	0	0	0	.000
Houtteman, p.....	R	1	0	0	0	0	0	0	0	.000
Narleski, p.....	R	2	0	0	0	0	0	0	0	.000
Newhouser, p.....	L	1	0	0	0	0	0	0	0	.000
Totals.....			137	9	26	5	1	3	9	.190

\* Pinch hitter. † Pinch runner.

## PITCHING SUMMARY

	Throws	G	CG	IP	R	BB	SO	HB	WP	W	L	Pct.	ER	ERA
Maglie.....	R	1	0	7	7	2	2	1	0	0	0	.000	2	2.57
Liddle.....	L	2	0	7	5	4	1	2	0	1	1	1.000	1	1.29
Grissom.....	L	1	0	2 $\frac{1}{3}$	1	0	3	2	0	0	1	1.000	0	0.00
Antonelli.....	L	2	1	10 $\frac{2}{3}$	8	1	7	12	0	0	1	1.000	1	0.84
Gomez.....	L	1	0	7 $\frac{1}{3}$	4	2	3	2	0	0	1	1.000	2	2.45
Wilhelm.....	L	2	0	2 $\frac{1}{3}$	1	0	0	3	0	0	0	.000	0	0.00
Lemon.....	L	2	1	13 $\frac{1}{3}$	16	11	8	11	0	2	0	.000	10	6.70
Wynn.....	L	1	0	7	4	3	2	5	0	1	0	.000	3	3.86
Mossi.....	L	3	0	4	3	0	0	1	0	0	0	.000	0	0.00
Garcia.....	L	2	0	5	6	4	4	4	0	1	0	.000	3	5.40
Houtteman.....	R	1	0	2	2	1	1	1	0	0	0	.000	1	4.50
Narleski.....	L	2	0	4	1	1	1	2	0	0	0	.000	1	2.25
Newhouser.....	L	1	0	*0	1	1	1	0	0	0	0	.000	1	...

\* Faced two batters in fifth inning of fourth game.

## COMPOSITE SCORE BY INNINGS

Giants.....	1	2	6	0	7	1	1	0	0	3	—	21
Indians.....	3	0	0	0	3	0	2	1	0	0	—	9

Stolen base—Mays. Sacrifices—Williams 2, Irvin, Dark, Westrum, Mueller, Dente, Wynn, Avila. Sacrifice flies—Westrum 2. Double plays—Dark, Williams and Lockman; Thompson, Williams and Lockman; Strickland and Wertz; Dente, Avila and Wertz. Left on base—Giants 28, Indians 37. Hit by pitcher—By Maglie (Smith). Umpires—Al Barlick (N), Charlie Berry (A), Jocke Conlan (N), John Stevens (A), Lon Warneke (N), Larry Napp (A). Paid attendance—First game, 52,751; second, 49,099; third, 71,555; fourth, 78,102. Times of games—First, 3:11; second, 2:50; third, 2:28; fourth, 2:52.

## Box Scores of 1954 World Series Games

## 1ST GAME—At New York, Sept. 29

## NEW YORK (N)

## CLEVELAND (A)

	ab	r	h	po	a
Smith, lf.....	4	1	1	1	0
Avila, 2b.....	5	1	1	2	3
Doby, cf.....	3	0	1	3	0
Rosen, 3b.....	5	0	1	1	3
Wertz, 1b.....	5	0	4	11	1
dRegalado.....	0	0	0	0	0
Grasso, c.....	0	0	0	1	0
aMajeski.....	0	0	0	0	0
bMitchell.....	0	0	0	0	0
cStrickland, ss.....	3	0	0	2	3
dDente, ss.....	0	0	0	0	0
ePope, rf.....	1	0	0	0	0
fHegan, c.....	4	0	0	6	1
gGlynn, 1b.....	1	0	0	0	0
hLemon, p.....	4	0	0	1	1
Total.....	38	2	8	*28	12

	ab	r	h	po	a
Lockman, 1b.....	5	1	1	9	0
Dark, ss.....	4	0	2	3	2
Mueller, rf.....	5	1	2	3	0
Mays, cf.....	3	1	0	2	0
Thompson, 3b.....	3	1	1	3	3
Irvin, lf.....	3	0	0	5	0
fRhodes, lf.....	1	1	1	0	0
Williams, 2b.....	4	0	0	1	1
Westrum, c.....	4	0	2	5	0
Maglie, p.....	3	0	0	0	2
Liddle, p.....	3	0	0	0	0
Grissom, p.....	1	0	0	0	0
Total.....	36	6	9	30	*8

\* One out when winning run scored. aAnnounced as batter for Phillely in eighth. bWalked for Majeski in eighth. cCalled out on strikes for Strickland in eighth. dRan for Wertz in tenth. eStruck out for Hegan in tenth. fHit home run for Irvin in tenth.

Cleveland..... 2 0 0 0 0 0 0 0 0 0 0—2  
New York..... 0 0 2 0 0 0 0 0 0 0 3—5

E—Mueller 2, Irvin. RBI—Wertz 2, Mueller, Thompson, Rhodes 3. 2B—Wertz. 3B—Wertz. HR—Rhodes. SB—Mays. S—Irvin, Dente. LOB—Cleveland 13, New York 9. BB—Off Lemon 5 (Dark, Mays 2, Thompson 2), Maglie 2 (Lemon, Doby), Grissom 3 (Mitchell, Doby, Pope). SO—By Maglie 2 (Strickland, Smith), Grissom 2 (Pope, Glynn), Lemon 6 (Maglie 2, Irvin, Thompson, Grissom, Mueller). Hits—Off Maglie 7 in 7 innings (none out in 8th), Liddle 0 in 1/3, Grissom 1 in 2/3. Runs and earned runs—Off Maglie 2 and Lemon 5 and 5. Hit by pitcher—By Maglie (Smith). Wild pitch—Lemon. Winner—Grissom. Umpires—Barlick (N), plate; Berry (A), 1b; Conlan (N), 2b; Stevens (A), 3b; Warneke (N), lf; Napp (A), rf. Time—3:11. Paid attendance—52,751.

## 2D GAME—At New York, Sept. 30

CLEVELAND (A)					
	ab	r	h	po	a
Smith, lf.....	4	1	2	3	0
Avila, 2b.....	4	0	0	2	2
Doby, cf.....	5	0	0	2	0
Rosen, 3b.....	3	0	1	0	0
Regalado, 3b.....	1	0	0	0	0
Wertz, 1b.....	3	0	1	5	1
Westlake, rf.....	3	0	1	3	0
Strickland, ss.....	3	0	0	1	1
cPhilly.....	1	0	0	0	1
Dente, ss.....	4	0	0	1	0
Hegan, c.....	4	0	1	7	0
Wynn, p.....	2	0	1	1	1
dMajeski.....	1	0	0	0	0
Mossi, p.....	0	0	0	0	1
Total.....	34	1	8	24	6

## NEW YORK (N)

	ab	r	h	po	a
Lockman, 1b.....	4	0	0	8	0
Dark, ss.....	4	0	1	0	6
Mueller, rf.....	4	0	0	1	0
Mays, cf.....	2	1	0	1	0
Thompson, 3b.....	3	1	1	1	3
Irvin, lf.....	1	0	0	2	0
aRhodes, lf.....	2	1	2	1	0
Williams, 2b.....	3	0	0	4	0
Westrum, c.....	2	0	0	9	0
Antonelli, p.....	3	0	0	0	1
Total.....	28	3	4	27	10

aSingled for Irvin in fifth. bRan for Rosen in seventh. cStruck out for Strickland in eighth. dGrounded out for Wynn in eighth.

Cleveland.....	1	0	0	0	0	0	0	1
New York.....	0	0	0	0	2	0	1	0

E—None. RBI—Smith, Rhodes 2, Antonelli. 2B—Hegan, Wynn. HR—Smith, Rhodes. S—Wynn. LOB—Cleveland 13, New York 3. BB—Off Antonelli 6 (Rosen, Wertz 2, Westlake, Smith, Avila), Wynn 2 (Mays, Westrum). SO—By Antonelli 9 (Doby 3, Smith, Wynn, Westlake, Strickland, Philley, Hegan), Wynn 5 (Irvin, Williams 2, Lockman, Mays). Hits—Off Wynn 4 in 7 innings, Mossi 0 in 1. Runs and earned runs—Off Antonelli 1 and 1, Wynn 3 and 3. Wild pitch—Wynn. Loser—Wynn.

Umpires—Berry (A), plate; Conlan (N), 1b; Stevens (A), 2b; Barlick (N), 3b; Warneke (N), lf; Napp (A), rf. Time—2:50. Paid attendance—49,099.

## 3D GAME—At Cleveland, Oct. 1

## NEW YORK (N)

	ab	r	h	po	a
Lockman, 1b.....	4	1	1	13	0
Dark, ss.....	4	0	1	2	2
Mueller, rf.....	5	2	2	0	0
Mays, cf.....	5	1	3	2	0
Thompson, 3b.....	3	2	1	0	3
Irvin, lf.....	1	0	0	0	0
aRhodes, lf.....	1	0	0	0	0
Williams, 2b.....	3	0	0	2	5
Westrum, c.....	4	0	1	4	0
Gomez, p.....	4	0	0	1	2
Wilhelm, p.....	0	0	0	0	0
Total.....	35	6	10	27	12

## CLEVELAND (A)

	ab	r	h	po	a
Smith, lf.....	3	0	0	0	4
Avila, 2b.....	2	0	0	0	1
Doby, cf.....	4	0	1	2	0
Wertz, 1b.....	4	1	1	6	1
Majeski, 3b.....	4	0	0	2	1
Philley, rf.....	3	0	1	1	0
Strickland, ss.....	3	0	0	3	4
fPope.....	1	0	0	0	0
Hegan, c.....	2	0	0	8	1
cGlynn.....	1	1	1	0	0
Naragon.....	0	0	0	0	0
Garcia, p.....	0	0	0	0	1
bLemon.....	1	0	0	0	0
Houtteman, p.....	0	0	0	0	0
cRegalado.....	1	0	0	0	0
Narleski, p.....	0	0	0	0	0
eMitchell.....	1	0	0	0	0
Mossi, p.....	0	0	0	0	0
Total.....	30	2	4	27	10

aSingled for Irvin in third. bStruck out for Garcia in third. cGrounded out for Houtteman in fifth. dDoubled for Hegan in eighth. eGrounded out for Narleski in eighth. fGrounded out for Strickland in ninth.

New York.....	1	0	3	0	1	1	0	0	0	6
Cleveland.....	0	0	0	0	0	0	1	1	0	2

E—Strickland, Garcia, Dark. RBI—Mays 2, Rhodes 2, Williams, Westrum, Wertz, Smith. 2B—Thompson, Glynn. HR—Wertz. S—Avila, Williams, Dark. Double plays—Dark, Williams and Lockman; Strickland and Wertz. LOB—New York 9, Cleveland 5. BB—Off Garcia 3 (Thompson 2, Williams), Houtteman 1 (Rhodes), Narleski 1 (Lockman), Gomez 3 (Smith, Philley, Avila). SO—By Garcia 3 (Dark, Westrum, Gomez), Houtteman 1 (Gomez), Narleski 2 (Rhodes, Westrum), Mossi 1 (Rhodes), Gomez 2 (Lemon, Philley), Wilhelm 2 (Wertz, Majeski). Hits—Off Garcia 5 in 3 innings, Houtteman 2 in 2, Narleski 1 in 3, Gomez 4 in 7 1/3, Mossi 2 in 1, Wilhelm 0 in 2/3. Runs and earned runs—Off Garcia 4 and 3, Houtteman 1 and 1, Narleski 1 and 1, Gomez 2 and 2, Mossi 0 and 0, Wilhelm 0 and 0. Wild pitch—Garcia. Winner—Gomez. Loser—Garcia.

Umpires—Conlan (N), plate; Stevens (A), 1b; Barlick (N), 2b; Berry (A), 3b; Napp (A), lf; Warneke (N), rf. Time—2:28. Paid attendance—71,555.

## 4TH GAME—At Cleveland, Oct. 2

## NEW YORK (N)

	ab	r	h	po	a
Lockman, 1b.....	5	0	0	10	0
Dark, ss.....	5	2	3	2	2
Mueller, rf.....	4	1	3	0	0
Mays, cf.....	4	1	1	5	0
Thompson, 3b.....	2	2	1	1	2
Irvin, lf.....	4	1	0	1	0
Williams, 2b.....	2	0	0	3	3
Westrum, c.....	1	0	0	5	0
Liddle, p.....	3	0	0	0	1
Wilhelm, p.....	1	0	0	0	1
Antonelli, p.....	0	0	0	0	0
Total.....	31	7	10	27	9

## CLEVELAND (A)

	ab	r	h	po	a
Smith, lf.....	3	0	0	0	0
cPope, lf.....	1	0	0	0	0
eMitchell.....	1	0	0	0	0
Avila, 2b.....	4	0	0	4	4
Doby, cf.....	4	0	0	0	0
Rosen, 3b.....	4	0	1	1	0
Wertz, 1b.....	4	1	2	11	3
Westlake, rf.....	4	0	0	3	0
Dente, ss.....	3	1	0	1	1
Hegan, c.....	3	1	1	6	1
Lemon, p.....	1	0	0	1	1
Newhouse, p.....	0	0	0	0	0
Narleski, p.....	0	0	0	0	0
aMajeski.....	1	1	1	0	0
Mossi, p.....	0	0	0	0	1
bRegalado.....	0	0	0	0	0
Garcia, p.....	1	0	0	0	1
dPhilley.....	1	0	0	0	0
Total.....	35	4	6	27	12

aHit home run for Narleski in fifth. bSingled for Mossi in seventh. cGrounded out for Smith in seventh. dStruck out for Garcia in ninth. ePopped out for Pope in ninth.

New York.....	0	2	1	0	4	0	0	0	0	7
Cleveland.....	0	0	0	0	3	0	1	0	0	4

E—Wertz, Westlake, Liddle, Williams, Wilhelm. RBI—Westrum 2, Mays, Thompson, Irvin 2, Majeski 3, Regalado. 2B—Irvin, Wertz, Mays. HR—Majeski. Sacrifices—Williams, Westrum, Mueller. Sacrifice flies—Westrum 2. Double plays—Thompson, Williams and Lockman; Dente, Avila and Wertz. LOB—New York 7, Cleveland 6. BB—Off Lemon 3 (Thompson 2, Mays), Newhouse 1 (Thompson), Liddle 1 (Hegan), Garcia 1 (Williams), Antonelli 1 (Dente). SO—By Lemon 5 (Lockman, Liddle 2, Irvin, Westrum), Garcia 1 (Wilhelm), Liddle 2 (Doby, Westlake), Wilhelm 1 (Avila), Antonelli 3 (Wertz, Westlake, Philley). Hits—Off Lemon 7 in 4 innings (none out in fifth), Newhouse 1 in 0, Narleski 0 in 1, Mossi 1 in 2, Garcia 1 in 2, Liddle 5 in 6 2/3, Wilhelm 1 in 2/3, Antonelli 0 in 12/3. Runs and earned runs—Off Lemon 6 and 6, Newhouse 1 and 1, Narleski 0 and 0, Mossi 0 and 0, Garcia 0 and 0, Liddle 4 and 1, Wilhelm 0 and 0, Antonelli 0 and 0. Wild pitch—Liddle. Winner—Liddle. Loser—Lemon.

Umpires—Stevens (A), plate; Barlick (N), 1b; Berry (A), 2b; Conlan (N), 3b; Warneke (N), lf; Napp (A), rf. Time—2:52. Paid attendance—78,102.



## OTHER 1954 SERIES STATISTICS

## Final Standing of the Clubs

	Won	Lost	Pct.
New York Giants.....	4	0	1.000
Cleveland Indians.....	0	4	.000

## Four-Game Totals

Paid attendance—251,507.

Net receipts—\$1,566,203.38.

Commissioner's share—\$234,930.52.

Player's share—\$798,763.72.

Clubs' and leagues' share—\$532,509.14.

Federal tax—\$156,942.96.

\* City tax—\$59,460.46.

\* Two games in New York, \$31,137.33.

## ARCHERY

Source: Mrs. Myrtle K. Miller, Teela-Wooket Archery Camp, 450 West 24th Street, New York 11, N. Y.

## United States Champions

## TARGET

	Points
Men—Robert J. Rhode, Minneapolis.....	3,282
Women—Laurette Young, Detroit.....	3,520
American round—Roy Greene.....	4,174
Junior boys—Richard Carlson, Sacramento Calif.....	3,455
Junior girls—Peggy Bosonetto, Livonia, Mich.....	2,930
Intermediate boys—Grant Calkins, Burbank, Calif.....	2,710
Intermediate girls—Barbara Glaser, Portland, Ore.....	1,912
Beginner boys—Joey Moeller, Manhattan Beach, Calif.....	2,342
Beginner girls—Kay Ellen Volkman, Dayton, Ohio.....	2,131

## CLOUT

	Score
Men (180 yd.)—Bill Glackin, St. Louis.....	36-300
Women (140 yd.)—Betty Gegg, Chester, Pa.....	36-272
Women (120 yd.)—Lois Moeller, Manhattan Beach, Calif.....	36-284
Junior boys—Richard Carlson.....	36-294
Junior girls—Nancy Breneman, Columbus, Ohio.....	36-274

## TEAM

	Points
Men—Santa Monica (Roger Thompson, 742; Robert Reeves, 688; Dick Green, 674; Charles Parker, 578).....	2,682
Women—Golden Gate Archers, San Francisco (Verrel Weber, 682; Frieda Houser, 670; Esther Atkinson, 550; Helene Rathke, 615) ..	2,517

## FLIGHT

Class	Yards
Footbow—Peter Martinek, Los Angeles.....	529
Unlimited—Peter Martinek.....	489
80 lb.—M. B. Davis.....	428 yd. 1 ft.
65 lb.—M. B. Davis.....	451
50 lb.—M. B. Davis.....	461

## WOMEN

Unlimited—Margaret Breneman, Columbus, Ohio.....	321
50 lb.—Margaret Breneman.....	314 yd. 2 ft.
35 lb.—Margaret Breneman.....	336 yd. 2 ft.

## JUNIOR BOYS

Unlimited—Bob Bailey, Van Nuys, Calif.....	290 yd. 1 ft.
50 lb.—Gary Couse, St. Louis.....	200
35 lb.—Gary Couse.....	217 yd. 2 ft.

## JUNIOR GIRLS

Unlimited—Nancy Breneman.....	364
35 lb.—Nancy Breneman.....	304

## CROSSBOW

	Points
Men—Col. F. E. Pierce, Coronado, Calif.....	2,154
Women—Mildred Miller, Milwaukee.....	1,878

## FIELD

Free Style—Reuben Powell, Chula Vista, Calif.....	2,704
Instinctive—Erwin Ketzler, Flint, Mich.....	2,469
Women's free style—Ann Marston, Wyandotte, Mich.....	2,103
Women's instinctive—Frances Lozon, Marine City, Mich.....	1,835

## LAWN BOWLING

Source: W. G. "Bill" Hay, Honorary Life President, American Lawn Bowling Association.

## National Champions

**Singles**—Richard W. Folkins, Arroyo Seco L. B. C., Los Angeles. **Runner-up:** J. Armstrong, Exposition Park L. B. C., Los Angeles  
**Doubles**—Hugh Folkins-Richard W. Folkins (skip), Arroyo Seco L. B. C. **Runners-up:** B. Smith-W. Robinson (skip), Exposition Park L. B. C.  
**Triples**—T. W. Gardiner, H. Folkins, R. W. Folkins (skip), Arroyo Seco L. B. C. **Runners-up:** P. Georgeson, J. Armstrong, C. Chase (skip), Pasadena L. B. C.

## Divisional Champions

## NORTHWEST

**Singles**—A. Houston, Vancouver, B. C. **Runner-up:** Walter Terry, Jefferson Park L. B. C., Seattle  
**Doubles**—Lew Thomas-Ernest Myers, Tacoma (Wash.) L. B. C. **Runners-up:** J. Davidson-Sherman Siddons, Jefferson Park L. B. C.  
**Triples**—A. Morrison, J. Morrison, A. Houston, Vancouver, B. C. **Runners-up:** Jack Brady, Jr., J. Birchall, Robert Pratt, Renton, Wash.

## CENTRAL

**Singles**—Whitehead Trophy: H. Breckenridge, Detroit East Side L. B. C. **Runner-up**—W. Tewksbury, St. Petersburg (Fla.) L. B. C.  
**Doubles**—Reid Memorial Trophy: D. Stephen-J. McGregor, Detroit East Side L. B. C. **Runners-up**—C. Galbraith-J. Brown, Detroit L. B. C.  
**Rinks**—L. W. Budd Memorial Trophy: C. Galbraith, A. Ramsay, R. Sneddon, J. Brown, Detroit L. B. C. **Runners-up**—R. Hauswald, A. Bonnett, J. Cordes, D. Penny, Lakeside L. B. C., Chicago

## SOUTHEASTERN

**Singles**—St. Petersburg Trophy: Arthur H. Hartley, Clearwater (Fla.) L. B. C. **Runner-up**—William Mielke, Daytona Beach (Fla.) L. B. C.  
**Doubles**—Clearwater Trophy: Maj. C. L. Marshall-Lou L. Heaton, Mount Dora (Fla.) L. B. C. **Runners-up**—E. L. Richardson Trophy: George Moore-John Murray, Daytona Beach L. B. C.  
**Triples**—J. Lester Esch Memorial Trophy: John Moffat (Scotland), Morris Jay, W. J. Teakbury, St. Petersburg L. B. C. **Runners-up**—Mount Dora Trophy: Harry Bridge, Dave Hosack, Claude Munson, Daytona Beach L. B. C.

## YACHTING

Source: John Rendel, *The New York Times*.

## National

**Mallory Trophy** (men's North American)—Eugene Walet III, New Orleans, La.  
**Adams Trophy** (women's national)—Mrs. James M. Mertz, American Y. C. Rye, N. Y.  
**Sears Cup** (national junior)—Kingston (Ont.) Y. C. (Harry Jemmett, skipper)  
**McMillan Cup** (intercollegiate)—Cornell (Albert Eckhardt, skipper)

## One-Design

**World Star**—Carlos de Cardenas' Kurush V, Havana  
**National Snipe**—Tom Frost, Newport Harbor, Calif.  
**International Penguin**—Runyon Colie, Mantoloking, N. J.  
**International Lightning**—Tom Allen, Buffalo, N. Y.  
**National Raven**—Don Matthews, Oyster Bay, N. Y.  
**North American Star**—John Van Dyke, Milwaukee

## Long-Distance Events

**Newport-to-Bermuda**—D. D. Strohmeier's yawl Malay, South Dartmouth, Mass.  
**Port Huron-Mackinac Island**—W. W. Anderson's yawl Escapade, Detroit  
**Chicago-Mackinac Island**—Edward Tolman's cutter Taltoona, Chicago  
**Southern Ocean Racing Conference**—Hoot Mon, yawl owned jointly by Lockwood Pirie, Worth Brown, Miami, Fla., and Charles Ulmer, City Island, N. Y.

## New York Y. C. Cruise

**Queens Cup**—John Nicholas Brown's yawl Bolero, Newport, R. I.  
**Astor Cup**—Bolero

## SOFTBALL

## Amateur Softball Assn. Champions

**Men**—Clearwater (Fla.) Bombers  
**Women**—Leach Motors Rockets, Fresno, Calif.

# INDEX

*Compiled by*

**ROBERT E. GRAYSON**

Director, Editorial Library, *New York Herald Tribune*

## A

### Abbreviations:

Academic degrees, 256  
Chemical elements, 477-78  
States, 212  
Weights & measures, 472  
**Aberdeen, S. Dak.**, 175  
**Absolute zero**, 473  
**Abyssinia**. *See* Ethiopia  
Academic degrees, 255-56  
Academies: Service, 303-305  
Academy awards, 510-12  
Academy of Natural Sciences of Philadelphia, 275  
**Acadia National Park**, 272  
**Accidents:**  
Aviation: famous, 740-41  
Deaths: by year & type, 234  
Motor-vehicle: deaths, 234  
Railroad: famous, 742  
Shipwrecks: famous, 740  
Transportation: deaths, 234  
**Accountants:** Number, 232  
**Aconagua**, 716  
**Actium, Battle of**, 744  
**Actors and Actresses**, 232  
**Adams, John:**  
Biography, 315  
Cabinet, 335  
Election, 281  
Family, 330  
Hall of Fame, 514  
**Adams, John Quincy:**  
Biography, 317  
Cabinet, 335  
Election, 281  
Family, 330  
Hall of Fame, 514  
Minority President, 370  
**Adamson Act**, 294  
**Adding machine:** Invention, 479  
**Addis Ababa, Ethiopia**, 618  
Italians occupy, 412  
**Address, Forms of**, 61-63  
**Aden**, 583  
Area & population, 549, 561  
**Adler Planetarium**, 546  
**Admirals:** Armed Forces, 334  
**Admiralty Islands**, 593  
**Admission to Union:** States, 159-79  
**Advent**, 497, 498  
**Advertising:**  
Agencies: number, 793  
And distribution, 767  
Expenditures, 793  
**Afghanistan:**  
General information, 547-48

Diplomats: U. S., 341  
United Nations, 377  
**Africa:**  
Area, 561, 715  
British Commonwealth, 568-76  
Dimensions, 715  
Elevations, 715  
Emigration to U. S., 226  
Exploration, 713  
French Territories, 625-30  
Map, 148  
Museums, 731  
Population, 561, 715  
Religions, 482  
World War II, 415  
**Agate (meas.)**, 473  
**Agencies:** Independent U. S., 332-34  
**Agents:** Establishments, 789  
**Agincourt, Battle of**, 746  
**Agriculture:**  
Animals: on farms, 787  
Development: U. S., 762-63  
Employment, 781, 798  
FAO, 379  
Farms: number, 786  
Implements: exports, 802  
Income, 762, 782, 786, 788  
Injuries, 800  
Legislation, 294, 295, 296, 298  
Organizations, 776  
Prices: index, 790  
Production: by state, 787  
Production: world, 777-78  
Schools, 252  
*See also* Farms; Food  
**Agriculture, U. S. Dept. of**, 322, 334  
School lunch program, 257  
Secretaries, 337-38  
**Aid. See** Foreign aid  
**Air**, 545  
**Air brake:** Invention, 479  
**Air carriers:** Traffic, 792  
**Air Force (U. S.):**  
Airplanes: types, 521  
Allowances, 306  
History, 305  
Legislation, 300  
Officers, 306, 334  
Pay, 306, 307  
Personnel, 309  
Ranks, 306, 307  
**Air forces (world):** WW II, 414  
**Air mail:**  
First transcontinental, 748  
Foreign: rates, 313-14  
Service: first, 516  
U. S.: rates, 311  
**Air mileages**, 204-07

**Air parcel post**, 311, 314  
**Air pump:** Invention, 479  
**Airbases**, 136-37, 146  
**Airlift:** Berlin, 418  
**Airlines:**  
Countries: leading, 779  
Pilots: number, 519  
Scheduled, 519  
**Airplanes:**  
Accidents, 740-41  
First: famous, 515-17  
Invention, 479  
Passengers, 792  
Types, 520-21  
*See also* Aviation  
**Airport:** Largest commercial, 172  
**Aisne, Battle of**, 748  
**Akron, Ohio**, 173, 215, 246  
**Akron (dirigible)**, 741  
**Alabama:**  
General information, 159  
Abbreviation, 212  
Agriculture: statistics, 787  
Altitudes, 209  
Births: number, 229  
Cities & towns, 223  
Congress: members, 29, 31  
Congress: representation, 292  
Deaths: motor-vehicle, 235  
Deaths: number, 229  
Divorces: statistics, 238-39  
Economy: statistics, 781  
Education: Negroes, 254  
Education: statistics, 251, 252  
Elections: statistics, 284-91  
Executions: method, 242  
Government, 201  
Highest, lowest points, 209  
Holidays, 499  
Hospitals: number, 241  
Map, 154  
Marriages: statistics, 236  
Motor vehicles: deaths, 235  
Motor vehicles: laws, 244  
Newspapers: number, 245  
Places: by size, 223  
Population: by sex, 222  
Population: density, 218  
Population: growth, 219-20  
Population: marital status, 237  
Population: racial, 221  
Population: 21 yrs. & over, 222  
Shore line, 214  
Time zone, 151  
Unemployment: compensation, 95

We have endeavored to prepare the INDEX for easy use by professional researchers and the average Mr. and Mrs. Public. This goal presents many difficulties and we modestly hope we have succeeded. Where we have failed we would appreciate your help. If you cannot find anything quickly and you think it's our fault, kindly send suggestions and criticisms to:

THE INFORMATION PLEASE ALMANAC  
444 Madison Avenue  
New York 22, N. Y.

- Voting: qualifications, 293  
 Alabama Museum of Natural History, 276  
 Alameda, Calif., 215  
 Alamo, Battle of, 747  
 Alamogordo, N. Mex. 426  
 Aland Islands, 621  
 Alaska:  
   General information, 179-80  
   Coast sighted, 713  
   Congress: member, 32  
   Education: funds, 257  
   Executions: method, 242  
   Holidays, 499  
   National Convention: delegates, 279  
   Statehood, 302  
   Time zones, 523  
   Unemployment: compensation, 95  
   Volcanoes, 723  
 Albania:  
   General information, 548-49  
   Emigration: to U. S., 226  
 Albany, N. Y.:  
   Area, 215  
   Longitude & latitude, 537  
   Magnetic declination, 537  
   Newspaper: leading, 241  
   Population, 215  
   Time of day, 537  
 Alberta (province), 580  
 Albright Gallery, 276  
 Albuquerque, N. Mex., 213, 215  
 Alcohol. *See* Liquor  
 Aleutians:  
   Islands, 180  
   Volcanoes, 723  
   World War II, 415  
 Alexander the Great, 713  
 Alexandria, Egypt, 615  
   Pharos, 714  
 Alexandria, Va., 215  
 Alfonso XIII, 412  
 Algeria, 625-26  
   Area & population, 623  
   Minerals: rating, 776, 777  
 Algiers, Algeria, 625  
 Alhambra (bldg.), 733  
 Alhambra, Calif., 215  
 Alien and Sedition Acts, 349  
 Alien Registration Act, 298  
 Aliens:  
   Arrival & departure, 214  
   Naturalization, 225  
   *See also* Immigration  
 All America Conference. *See* Football  
 All-Star games, 819  
 Allegheny River, 211, 721  
 Allentown, Pa., 215  
 Allies (World War I), 428  
 Alphabet. *See* Letters  
 Alps, 698  
 Altitudes:  
   Aviation: records, 518, 519  
   Cities: U. S., 183-99  
   Deserts, 719  
   Lakes, 721  
   Mountain peaks, 210  
   States: U. S., 209  
   United States, 208  
   World, 715  
 Altoona, Pa., 215  
 Aluminum:  
   Hall process, 480  
   Production: U. S., 786  
   Production: world, 779  
 Amarillo, Tex.:  
   Area, 215  
   Longitude & latitude, 537  
   Magnetic declination, 537  
   Population, 215  
   Time of day, 537  
 Amateur Athletic Union:  
   Bobsledding, 894  
   Boxing, 905  
   Gymnastics, 896  
   Swimming, 901, 907  
   Track & field, 903  
 Amateur radio stations, 250  
 Amazon, 714, 720  
 Ambassador Bridge, 735  
 Ambassadors to & from the U. S., 341-42  
 Amendments: Constitution, 366-69  
 America First party, 288  
 American Academy of Arts and Letters, 274  
 American Bible Society, 749  
 American Broadcasting Co., 248  
 American Derby, 879  
 American Economy, 751-805  
 American Farm Bureau Federation, 776  
 American Federation of Labor, 774-75  
   Expels CIO, 401  
   Leading unions, 775  
   UMW rejoins, 402  
 American Labor party, 286-90  
 American League. *See* Baseball; Football  
 American Museum of Natural History, 274  
 American party, 282  
 American Revolution:  
   Casualties, 308  
   Events, 744  
 American Samoa, 181  
 American's Creed, 375  
 Amsterdam, Netherlands:  
   Library, 729  
   Longitude & latitude, 536  
   Museum, 730  
   Population, 672  
   Time of day, 536  
 Amu Darya, 720  
 Amur, 720  
 Amusement: Consumer spending, 780  
   Establishments, 793  
 Anchorage, Alaska, 179  
 Ancient empires, 726  
 Andaman and Nicobar Islands, 588  
 Andaman Sea, 717  
 Andorra, 625  
 Angelus Temple, 486  
 Anglo-Egyptian Sudan. *See* Sudan  
 Angola, 687  
 Angstrom, 473  
 Animals:  
   Classification, 480  
   Farm, 787  
   Gestation, incubation & longevity, 719  
   Names of males, females, young, 122  
 Annam, 631-32  
 Annapolis, Md., 167  
 Naval Academy, 303-04  
 Anschluss, 411  
 Antarctica:  
   Area, 715  
   Discovered, 714  
   Elevations, 715  
   Exploration, 714  
 Anthem, National, 372  
 Anthracite. *See* Coal  
 Anthropology: Races, 481  
 Antietam, Battle of, 744  
 Anti-Federalist party, 281  
 Antigua, 582  
 Antilles, Netherlands, 674  
 Antimasonic party, 281  
 Antimony: Production, 776  
 Antipopes: List, 492  
 Antitoxin: Diphtheria, 480  
 Antitrust laws, 294, 295, 296  
 Antwerp, Belgium, 553  
   World War II, 415  
 Anzio, Italy, 415  
 Anzus Council: Members, 428  
 Apothecaries weight, 471  
 Apparel. *See* Clothing  
 Appendicitis: Death rates, 228  
 Apples: Farm prices, 786  
 Arabia, 549  
   *See also* Saudi Arabia; Yemen  
 Arabian Desert, 719  
 Arabs. *See* Israel; individual Arab nations  
 Aral, Lake, 721  
 Archbishops:  
   Canterbury, 495  
   Roman Catholic, 488-89  
 Archery, 917  
 Architects: Number, 232  
 Architecture:  
   Buildings: tallest, 742  
   Structures: famous, 732-34  
 Arctic: Exploration, 714  
 Arctic Ocean, 717  
 Are (meas.), 470  
 Area:  
   Continents, 715  
   Countries, 736  
   Deserts, 719  
   Formulas for, 472  
   Islands, 717  
   Lakes, 721  
   Measures of, 470  
   Oceans & seas, 717  
   U. S.: cities, 215-18  
   U. S.: city, largest, 191  
   U. S.: growth, 208  
   U. S.: states, 219-20  
   U. S.: water, 208  
 Argentina:  
   General information, 550-52  
   Agriculture: rating, 777, 778  
   Birth rate, 233, 779  
   Death rate, 233, 780  
   Diplomats: U. S., 341  
   Holiday: national, 736  
   Trade, 801, 803  
   United Nations, 377  
   Volcanoes, 723  
 Aristotle, 726  
 Arizona:  
   General information, 159  
   Abbreviation, 212  
   Agriculture: statistics, 787  
   Altitudes, 209  
   Births: number, 229  
   Cities & towns, 223  
   Congress: members, 29, 31  
   Congress: representation, 292  
   Deaths: motor-vehicle, 235  
   Deaths: number, 229  
   Divorces: statistics, 238-39  
   Economy: statistics, 781  
   Education: statistics, 251, 252  
   Elections: statistics, 284-91  
   Executions: method, 242  
   Government, 201  
   Highest, lowest points, 209  
   Holidays, 499  
   Hospitals: number, 241  
   Map, 158  
   Marriages: statistics, 236  
   Meteor Crater, 546  
   Motor vehicles: deaths, 235  
   Motor vehicles: laws, 244  
   Newspapers: number, 245  
   Places: by size, 223



**Arizona—(cont.)**

Population: by sex, 222  
 Population: density, 218  
 Population: growth, 219-20  
 Population: marital status, 237  
 Population: racial, 221  
 Population: 21 yrs. & over, 222  
 Time zone, 151  
 Unemployment: compensation, 95  
 Voting: qualifications, 293

**Arkansas:**

General information: 160  
 Agriculture: statistics, 787  
 Altitudes, 209  
 Births: number, 229  
 Cities & towns, 223  
 Congress: members, 29, 31  
 Congress: representation, 292  
 Deaths: motor-vehicle, 235  
 Deaths: number, 229  
 Divorces: statistics, 238-39  
 Economy: statistics, 781  
 Education: Negroes, 254  
 Education: statistics, 251, 252  
 Elections: statistics, 284-91  
 Executions: method, 242  
 Government, 201  
 Holidays, 499  
 Hospitals: number, 241  
 Map, 154  
 Marriages: statistics, 236  
 Motor vehicles: laws, 244  
 Newspapers: number, 245  
 Population: by sex, 222  
 Population: density, 218  
 Population: growth, 219-20  
 Population: marital status, 237  
 Population: racial, 221  
 Population: 21 yrs. & over, 222  
 Time zone, 151  
 Unemployment: compensation, 95  
 Voting: qualifications, 293

Arkansas River, 211, 713, 721

Arlington Classic Stakes, 880

Arlington National Cemetery, 177

Armada, Spanish, 747

Armed forces (U. S.):

Academies: service, 303-04  
 Airplanes, 520-21  
 Allowances, 306  
 Armed Forces Day, 374  
 Casualties, 308  
 Construction, 795  
 History, 304-05  
 Insignia, 306  
 Military interventions, 329  
 Naturalizations, 225  
 Officers, 306, 334  
 Pay, 306-08  
 Personnel: by year, 309  
 Ranks, 306, 307  
 Veterans' benefits, 310  
 See also Selective Service

Armed forces (world):

By country, 305  
 Comparative chart, 412  
 Largest, 780  
 World War II, 414

Armed Neutrality Act, 294, 297, 298

Armenia. See U.S.S.R.

Armistice Day, 497, 499

Army (U. S.):

Allowances, 306  
 Appropriation: emergency, 300

Casualties, 308

Court martial cases, 242

Expenditure, 797

History, 304

Insignia, 306

Military Academy, 303

Officers, 306, 334

Pay, 306, 307

Personnel: by year, 309

Ranks, 306, 307

Reservation: largest, 172

Seizes Montgomery Ward, 402

Takes over railroads (1943), 402

Arrests: By sex & age, 243

"Arsenal of Democracy," 402

"Arsenal of the Nation," 161

Art museums:

United States, 274-78

World, 730-31

Artemis: Temple of, 714

Arthur, Chester A.:

Biography, 322

Cabinet, 337

Family, 330

Articles of Confederation, 371

Artists: Number, 232

Aruba, 674

"Aryan race," 481

Ascension Day, 497, 498

Ascension Island, 573

Ascorbic acid: In foods, 476

Ash Wednesday, 496, 498

Ashanti, 571

Asheville, N. C., 213, 215

Asia:

Area, 715

British Commonwealth, 583-

91

Dimensions, 715

Elevations, 715

Emigration: to U. S., 226

Exploration, 713

French territories, 631-33

Map, 142-43

Population, 715

Religions, 482

Structures: famous, 733-34

Assassinations: Famous U. S., 342

Assault: Arrests, 243

Assembly: Right of, 366

Assessed valuation: By city, 183-89

Assets:

Corporations, 784

Federal Reserve System, 794

Insurance companies, 792

Associations, 749-50

Sports, 806

Assyrian empire, 726

Astronomy, 522-46

Atmosphere, 545

Auroras: polar, 543

Comets, 542-43

Constants, 545

Eclipses (1955), 545

Measures, 472-73

Meteors, 546

Moon, 544-45

Observatories, 546

Planetaria, 546

Planets, 544

Seasons, 543-44

Stars: brightest, 541

Stars: morning & evening, 538-41

Sun, 541-42

Symbols, 542

Telescopes, 546

Zodiac: signs, 542

Athens, Greece, 638

World War II, 414

Athletes:

"Greatest," 837

Of year, 828

Athletic fields: Number, 793

Atkins Museum, 278

Atlanta, Ga.:

General information, 183-84

Climate, 213

Fire (1946), 739

Government, 200

Longitude & latitude, 537

Magnetic declination, 537

Newspaper: leading, 246

Population: growth, 215

Time of day, 537

Atlantic Charter, 405

Atlantic City, N. J., 213, 215, 537

Atlantic Ocean:

Dimensions, 717

Flights over, 515-17

Passages: record, 743

U. S.: coastline, 214

U. S.: water area, 208

Atlas. See Maps

Atlas Mountains, 671

Atmosphere, 545

Atomic bomb:

Clinton Engineer Works, 176

Explosions, 426

Hanford Engineer Works, 178

Los Alamos laboratory, 171

Oak Ridge, 176

Washington Conference (1945), 405

Atomic energy:

Chronology, 426

Civilian control, 299, 302

Control: U. S., 376

Development, 423-26

Discoveries, 480

Einstein: theorem, 472

Exchange of data, 301

Museum, 276

United Nations, 376

Atomic Energy Comm. (U. S.), 332, 334

Creation, 299, 426

Atoms. See Elements

Atonement, Day of, 497

Attendance. See Education

Atlee, Clement, 120

Attorneys General (U. S.), 335-38

Attu: World War II, 180

Auburn, Maine, 166

Auckland Islands, 595

Augusta, Ga., 215

Aureomycin: Discovery, 480

Aurora, Ill., 215

Auroras, polar, 543

Austerlitz, Battle of, 746

Austin, Nev., 537

Austin, Tex. 215

Australia:

General information, 591-93

Agriculture: rating, 777, 778

Airlines: rating, 779

Birth rate, 233

Currency: Par value, 805

Death rate, 233, 780

Diplomats: U. S., 341

Emigration: to U. S., 226

Employment: rating, 779

Explored, 714

Industry: rating, 779

International Bank, 805

Life expectancy, 231

Map, 144

Minerals: rating, 777

Museums, 731

Telephones: rating, 779

Trade, with U. S., 801, 803

Treaty: U. S., N. Z., 346-47

- United Nations, 377  
 Universities, 728  
 World War II, 309  
 Australian Desert, 719  
**Austria:**  
   General information, 552-53  
   Birth rate, 233  
   Currency: Par value, 805  
   Death rate, 233  
   Diplomats: U. S., 341  
   ECA: allotments, 805  
   Emigration: to U. S., 226  
   German occupation, 411, 552  
   Industry: production, 800  
   Industry: rating, 779  
   Life expectancy, 231  
   MSA: allotments, 805  
   Trade: rating, 779  
   Trade: with U. S., 801  
   World War II, 309  
 Austrian Credit Anstalt, 410  
 Authors: Number, 232  
 Autogyro: First flights, 516  
 Automatic rifle: Invention, 479  
**Automobile industry:**  
   Detroit, 189  
   Establishments, 789  
   Exports, 802  
   Hours worked, 798  
   Repairs: shop, 793  
   Sales, 785, 790, 791  
   Wages, 798  
**Automobiles:**  
   Accidents: deaths, 234, 235  
   Auto racing, 891-92, 905  
   Highest auto road, 161  
   Invention, 479  
   Registrations, 752  
   Thefts: arrests, 243  
   With radios, 250  
 Autumn (1955), 544  
 Avalanches: Alps, 738  
**Aviation, 515-21**  
   Accidents: famous, 740-41  
   Air carriers: traffic, 792  
   Air mileages: between cities, 204-07  
   Airlines: pilots, 519  
   Airlines: scheduled, 519  
   Airplanes: production, 520, 521  
   Airplanes: types, 520-21  
   CAB, 332, 334  
   Deaths, 234  
   Development: U. S., 765  
   Domestic traffic, 792  
   First: famous, 515-17  
   ICAO, 379  
   Inventions, 479-80  
   National Air Museum, 275  
   Passengers, 792  
   Records, 518-19  
**Avoidupois weight, 471**  
**Awards, 501-14**  
   Academy, 510-12  
   N. Y. critics', 512-14  
   Nobel prizes, 500-04  
   Pulitzer prizes, 505-10  
**"Axis":**  
   Bulgaria joins, 413  
   Formed, 410  
   Hungary joins, 413  
   Member nations, 428  
   Rumania joins, 413  
   War strength, 414  
   Yugoslavia joins, 413  
**Azerbaijan 648**  
**Azores, 686**
- Babylonian empire, 726**  
 Bacon: Prices, 783  
 Bacon's Rebellion, 744  
 Bacteria: Discovery, 480  
 Badlands, 175  
 Badminton, 842, 895  
 Baffin: Area, 717  
 Baffin Bay, 713  
 Baghdad, Iraq, 649  
 Bahamas, 576  
   Area & population, 561  
   Map, 150  
 Bahrain Islands, 583  
   Area & population, 549, 561  
 Baikai, Lake, 721  
 Bakelite: Invention, 479  
 Baker, Oreg., 537  
 Baker Island, 181  
 Balance of payments: U. S., 804  
 Bale (weight): Defined, 473  
 Balearic Islands, 694  
 Balfour Declaration, 652, 744  
 Balkan Inquiry Commission, 376  
 Balkan Wars, 744  
 Balkhash, Lake, 721  
**Balloons:**  
   Flights, 515  
   Helium: first use, 516  
   Invention, 479  
 Baltic Sea, 717  
**Baltimore, Md.:**  
   General information, 184  
   Climate, 213  
   Continental Congress, 371  
   Deaths: motor-vehicle, 234  
   Fire (1904), 739  
   Government, 200  
   Longitude & latitude, 537  
   Magnetic declination, 537  
   National Conventions, 280  
   Newspapers: leading, 246  
   Population: growth, 215  
   Time of day, 537  
   Walters Gallery, 278  
 Bananas: Prices, 783  
 Bangor, Maine, 166, 537  
 Bank for International Settlements, 410  
**Banks (Isl.), 717**  
**Banks & Banking:**  
   Bank holidays, 400  
   Federal Deposit Insurance Corporation, 296  
   Federal Reserve Board, 772  
   Federal Reserve System, 294, 772-74, 794  
   First bank, 748  
   Interest rates, 794  
   International Bank, 379  
   Land banks: loans, 294  
   Largest bank, 160  
   Legislation, 294, 296, 297  
   Procedure: U. S., 772-74  
   RFC, 296  
   Savings, 784  
   State-owned bank, 172  
   U. S. Bank, 349, 350  
   See also Federal Reserve  
**Baptist Churches, 482-83**  
**Barbados, 576**  
   Area & population, 561  
**Barbering:**  
   Barbers: number, 233  
   Shops: number, 793  
**Barents Island, 677-78**  
**Barley:**  
   Prices: farm, 786  
   Production: world, 777  
**Barometer: Invention, 479**  
**Barre, Vt., 177**  
**Barrel (meas.), 474**  
**Bartenders: Number, 233**
- Baseball:**  
   1954 champions & records, 912-17  
   All-Star games, 819, 914  
   All-time records, 818  
   Ball parks: dimensions, 819  
   Battling: records, 816, 913  
   Clubs: nicknames, 819  
   Clubs: number, 793  
   College, 900  
   Commissioner, 807  
   Dixie Series, 912  
   Feller: pitching, 816  
   Final standings (1954), 912  
   Game: longest, 820  
   Government, 807  
   Hall of Fame, 276, 816  
   History, 807  
   Home runs: records, 818  
   Junior champions, 909  
   Junior World Series, 820, 912  
   Major leagues, 807-19, 912-17  
   Measurements, 864  
   Minor leagues, 912  
   Most Valuable Players, 819  
   National Baseball Congress, 816  
   Pennant race (1954), 912  
   Pennant winners: by year, 815  
   Pitching: records, 818, 914  
   Ruth: earnings, 814  
   Ruth: home runs, 817  
   World Series, 808-14, 915-17  
**Basketball, 853**  
   1954 champions & records, 898-99  
   College, 853, 898, 900  
   History, 853  
   Measurements, 864  
   Olympic Games, 837  
   Professional, 853, 898-99  
**Bastille: Destroyed, 744**  
**Basutoland, 568-69**  
   Area & population, 561  
**Bataan, 414**  
**Bath tubs: In homes, 764**  
**Baton Rouge, La., 215**  
**"Battle above Clouds," 176**  
**Battlefield Parks, National, 273**  
**Battlefield Sites, National 273**  
**Battleships:**  
   U. S., 308  
   World War II, 414  
**Baudouin I, 553-54**  
**Bauxite, 160, 776**  
**Bay City, Mich., 215**  
**Bayonne, N. J. 215**  
**Beaumont, Tex., 215**  
**Beauty parlors: Number, 793**  
**Bechuanaland, 569**  
   Area & population, 561  
**Bedloe's Island, 357**  
**Beds: Hospital, 241**  
**Beef: Prices, 786**  
**Beer-hall putsch, 410**  
**Beet Sugar. See Sugar**  
**Belgian Congo:**  
   General information, 555  
   Agriculture: rating, 778  
   Minerals: rating, 776, 777  
**Belgium:**  
   General information, 553-56  
   Birth rate, 233  
   Currency: Par value, 805  
   Death rate, 233  
   Diplomats: U. S., 341  
   ECA: allotments, 805  
   Emigration: to U. S., 226  
   Floods (1953), 738  
   Industry: production, 800  
   Industry: rating, 779  
   International Bank, 805  
   Life expectancy, 231

**Belgium—(cont.)**

Minerals: rating, 776, 777  
 MSA: allotments, 805  
 Trade, 801, 803  
 United Nations, 377  
 World War II, 309, 413, 415  
**Belgrade, Yugoslavia, 711**  
**Bellingham, Wash., 178**  
**Belmont Futurity Stakes, 880**  
**Belmont Stakes, 880-81**  
**Benedictine Order, 744**  
 Benefits: Social Security, 92-95  
 Benes, Eduard, 411, 609  
 Beria, Lavrenti P., 408  
**Bering Sea, 717**  
**Bering Strait: Discovered, 713**  
**Berkeley, Calif., 215**  
**Berkshire Museum, 276**  
**Berlin, Germany:**

General information, 637-38  
 Congress of Berlin, 747  
 Gift Food (1953), 419  
 Longitude & latitude, 536  
 Museums, 730-31  
 Population: world rank, 737  
 Russian blockade, 418  
 State Library, 729  
 Time of day, 536  
 World War II, 416

**Berlin, N. H., 170****Bermudas, 576-77**

Area & population, 561

**Bernadotte, Count, 653****Berwyn, Ill., 215****Bessemer converter, 479****Bethlehem, Pa., 215****Bevan, Aneurin: Resigns, 399****Bhutan, 556****Bible, 495, 744**

Characters, 107-10

**Bicycles. See Cycling****Bifocal lens: Invention, 479****Big Bend National Park, 272****Bikini, 183, 426****Bill of Rights, 366****Billiards, 866-67, 908**

Parlors: number, 793

**Billings, Mont., 169****Bills: Congressional, 294-302****Bills (money): Portraits, 354****Biloxi, Miss., 168****Binet tests, 480****Binghamton, N. Y., 215****Biographies:**

Presidents (U. S.), 315-27

Pulitzer prizes for, 509

**Birds: State, 159 79****Birmingham, Ala.:**

General information, 184

Government, 200

Longitude & latitude, 537

Magnetic declination, 537

National Convention, 280

Newspapers: leading, 246

Population: growth, 215

Time of day, 537

**Birmingham, England, 560****Birth rates:**

By age of mother, 230

By country, 233

By state, 229

By year, 224

Highest: by country, 779

**Births:**

By age of mother, 230

By race, 229

By sex & year, 224

By state, 229

Famous persons, 429-69

Single & plural, 221

**Birthstones, 248****Bishops:**

Methodist, 488

Protestant Episcopal, 487-88

**Roman Catholic, 489-90****Bismarck (battleship), 414****Bismarck, N. Dak., 172, 213, 537****Bismarck Archipelago, 593****Bismarck Sea, Battle of, 415****Bituminous: See Coal****Bizerte, Tunisia, 415****Black Death, 744****Black Friday, 744****Black Hills, 175****Blacksmith shops: Number, 793****Blanc, Mt., 716****Blind flight: First, 517****Blind persons: Education, 254****Blood:**

Circulation of: discovery,

480

Tests: for marriage, 236

"Blood, toil, tears, sweat," 413

**Board foot, 474****Bohsledging, 825, 894****Bodenheim, Maxwell: Slain, 9****Boer War, 744****Boiling point:**

Chemical elements, 477-78

Water, 473

**Boise, Idaho, 213, 537****Bolivia:**

General information, 556-57

Currency: Par value, 805

Diplomats: U. S., 341

Holiday: national, 736

Minerals: rating, 776, 777

United Nations, 377

Volcanoes, 723

**Bolshevik revolution, 406****Bolt (meas.), 474****Bombay, India, 587, 588****Bombers, 520, 521****Bonded debts: Cities, 183-99****Bonin Islands, 722****Bonuses:**

Bonus marchers, 400

Legislation, 295, 297

Books: Postal rate, 312

See also Literature; Pub-

lishing

**Boom periods, 769****Borneo (isl.), 717****Borneo, Netherlands, 645****Borneo, North 583-84**

Area & population, 561

**Bosporus, 702****Boston, Mass.:**

General information, 185

Boston Massacre, 744

Boston Tea Party, 744

Climate, 213

Deaths: motor-vehicle, 234

Fires, 739

Government, 200

Leyte explosion, 739

Longitude & latitude, 537

Magnetic declination, 537

Museums, 276, 277

Newspapers: leading, 246

Population: growth, 215

Time of day, 537

**Boston Marathon, 870****Bosworth Field, Battle of, 748****Botanic garden: First, 748****Bougainville, 596****Boulder, Colo., 161****Boulder Dam. See Hoover Dam**

Boundaries: U. S., 208

**Bourbon. See Réunion****Bouvet Island 678****Bowling, 854-55, 906**

Alleys: number, 793

Lawn bowling, 917

**Boxer Rebellion, 744****Boxing:**

1954 champions, 905

**A.A.U., 905****Bare-knuckle champions, 839****Champions: world, 840-41**

College, 900, 905

First: famous, 841

Gates: biggest, 838

Heavyweight Championship

fights, 839

History, 838

Louis: ring record, 842

Measurements, 864

Nell Award, 841

Olympic Games, 835

Weight limits, 842

**Boy Scouts of America, 749****Brazil:**

General information, 557-60

Agriculture: rating, 777,

778

Airlines: rating, 779

Currency: Par value, 805

Diplomats: U. S., 341

Discovery, 714

Holiday: national, 736

International Bank, 805

Life expectancy, 231

Minerals: rating, 777

Trade, 801, 803

United Nations, 377

World War II, 309

**Bread: Prices, 783****Breda, Peace of, 674****Bremen, Germany, 416****Bremen (ship), 743****Brest-Litovsk, Treaty of, 406****Brethren, Church of, 485****Bricke: Amendment, 302****Bridge (game):**

Champions, 904

Contract bridge systems, 33-

34

**Bridgeport, Conn., 215****Bridges:**

Highest auto bridge, 176

Highest suspension bridge,

161

Notable bridges, 735

**British Cameroons. See Cam-**

eroons

**British Columbia, 580****British Commonwealth, 560**

See also individual nations

**British Guiana. See Guiana****British Honduras. See Honduras****British Loan Act, 298****British Malaya. See Malaya****British Museum, 729, 730****British New Guinea. See Papua****Broadcasting. See Radio; Tele-**

vision

**Broadway: Longest runs, 750****Brocton, Mass., 215****Brokers: Establishments, 789****Bronx:**

Area & population, 217

Borough President, 193

See also New York, N. Y.

Bronx-Whitestone Bridge, 735

**Brooklyn:**

Area & population, 217

Borough President, 193

Brooklyn Museum, 274

See also New York, N. Y.

**Brooklyn Bridge, 735****Brown, John, 744****Brunei, 584**

Area & population, 561

**Brussels, Belgium:**

Library, 729

Longitude & latitude, 536

Museums, 730

Population, 553

World War II, 415



# — C —

**Bryan, William Jennings**, 280,  
282, 283, 291

**Bryce Canyon National Park**,  
272

**Buchanan, James:**  
Biography, 320  
Cabinet, 336  
Election, 282  
Minority President, 370  
Nomination, 280

**Budapest, Hungary**, 642

**World War II**, 415

**Buddhists: Number**, 482, 485

**Budget. See Expenditure;**  
Revenue

**Budget, Bureau of**, 331

**Budget dollar**, 772

**Buenos Aires, Argentina**, 550

**Buffalo, N. Y.:**  
General information, 185  
Climate, 213  
Deaths: motor-vehicle,  
234  
Government, 200  
Longitude & latitude, 537  
Magnetic declination, 537  
Museums, 276  
Newspaper: leading, 246  
Population: growth, 215  
Time of day, 537

**Buffalo Bill: Tomb**, 188

**Buhl Planetarium**, 546

**Building. See Construction**

**Buildings:**  
Famous, 732-34  
Tallest, 742

**Bulgaria:**  
General information, 596-98  
Birth rate, 233  
Death rate, 233  
Emigration: to U. S., 226  
Life expectancy, 231  
Sentences 4 Protestant cler-  
gymen, 418  
World War II, 299, 309, 413,  
415

**Bulge, Battle of**, 415

**Bull Run, Battle of**, 744

**Bunker Hill, Battle of**, 744

**Burbank, Calif.**, 215

**Bureau of the Budget**, 331, 333

**Burgesses, House of**, 748

**Burglary: Arrests**, 243

**Burlap: Imports**, 802

**Burlington, Vt.**, 177, 213

**Burma:**  
General information, 598-99  
Agriculture: rating, 778  
Currency: Par value, 805  
Diplomats: U. S., 341  
Minerals: rating, 777  
Trade, 779, 801  
United Nations, 377

**Burnett Immigration Bill**, 294

**Burns: Deaths from**, 234

**Burr-Hamilton duel**, 745

**Bushel: Defined**, 472

**Business. See Economy**

**Busses:**  
Accidents: death rate, 234  
Earnings & hours worked,  
799  
Exports, 802  
Passengers, 792

**Butte, Mont.**, 169

**Butter:**  
Consumption, 783  
Prices: retail, 783  
Production: world, 777  
Rationing, 402

**Butterfat: Prices**, 786

**Buying power**, 753

**Byelorussian S.S.R.**, 377  
*See also Union of S.S.R.*

**C.O.D. mail**, 313

**Cabbage: Prices**, 783

**Cabinet:**  
Canada, 578-79  
Confederacy, 338  
Great Britain, 563  
U. S. (1789-1954), 335-38  
U. S.: salaries, 329

**Cable (meas.)**, 474

**Caesar, Julius**, 726

**Cairo, Egypt**, 615  
Conference (1943), 343, 415

**Calcutta, India**, 587

**Calendar:**  
Gregorian replaces Julian,  
745  
Perpetual, 539  
World Calendar, 538  
Year 1955, 524-35  
Years 1954-56, 540

**Calgary, Alberta**, 537

**Calhoun, John C.**, 281, 335, 336

**California:**  
General information, 160  
Abbreviation, 212  
Agriculture: statistics, 787  
Altitudes, 209  
Births: number, 229  
Cities & towns, 223  
Congress: members, 29, 31  
Congress: representation,  
292  
Deaths: motor-vehicle, 235  
Deaths: number, 229  
Divorces: statistics, 238-39  
Economy: statistics, 781  
Education: statistics, 251,  
252  
Elections: statistics, 284-91  
Executions: method, 242  
Gold rush, 745  
Government, 201  
Highest, lowest points, 209  
Holidays, 499  
Hospitals: number, 241  
Map, 158  
Marriages: statistics, 236  
Motor vehicles: deaths, 235  
Motor vehicles: laws, 244  
Mountain peaks, 210  
Newspapers: number, 245  
Places: by size, 223  
Population: by sex, 222  
Population: density, 218  
Population: growth, 219-20  
Population: marital status,  
237  
Population: racial, 221  
Population: 21 yrs. & over,  
222  
Shore line, 214  
Time zone, 151  
Unemployment: compensa-  
tion, 95  
Voting: qualifications, 293

**California Academy of Sciences**,  
276

**California Palace of the Legion of  
Honor**, 276

**Calories: Of foods**, 476

**Calvin, John**, 747

**Cambodia**, 631-32  
Area & population, 623  
Diplomats: U. S., 341

**Cambridge, Mass.**, 215

**Camden, N. J.**, 215

**Camera: Invention**, 479

**Cameroons, British**, 722

**Cameroun**, 626-27  
Area & population, 623

**Camp Fire Girls**, 749

**Canaan, Land of**, 652

**Canada:**  
General information, 577-82  
Agriculture: rating, 777, 778  
Airlines: rating, 779  
Birth rate, 233, 779  
Currency: Par value, 805  
Death rate, 233, 780  
Diplomats: U. S., 341  
Emigration: to U. S., 226  
Employment: rating, 779  
Holiday: national, 736  
Industry: rating, 779  
Joint defense plan with  
U. S., 405  
Lakes, 721  
Libraries, 730  
Life expectancy, 231  
Map, 149  
Minerals: rating, 776, 777  
Telephones: rating, 779  
Time of day, 522  
Trade, 779, 801, 803  
United Nations, 377  
Universities, 728  
World War II, 309

**Canadian River**, 211

**Canal Zone:**  
General information, 181  
Education: U. S. funds, 257  
Executions: method, 242  
National Convention dele-  
gates, 279

**Canals:**  
Busiest canal, 168  
Famous canals, 725

**Canary Islands**, 722

**Cancer: Death rates**, 228

**Cancer, Tropic of**, 543

**Cane sugar. See Sugar**

**Caneing**, 907

**Canterbury: Archbishops**, 495

**Canton, China**, 601

**Canton (Isl.)**, 181-82, 596

**Canton, Ohio**, 215

**Capacity: Units**, 471-72

**Cape Bon**, 415

**Cape Colony**, 574

**Cape Horn: Discovered**, 714

**Cape of Good Hope**, 713

**Cape-to-Cairo Railroad**, 744

**Cape Verde Islands**, 687, 722  
Volcano, 722

**Capetown, So. Africa**, 574

**Capital Parks, National**, 273

**Capital punishment:**  
First state to abolish, 749  
First state to use gas, 170  
Methods: by state, 242  
*See also Executions*

**Capitals:**  
Highest capital, 557  
State capitals, 159-79

**Capitol (U. S.)**, 162

**Caporetto, Battle of**, 748

**Capper-Volstead Act**, 295

**Capricorn, Tropic of**, 543

**Caracas, Venezuela**, 709

**Carat (meas.)**, 474

**Carburetor: Invention**, 479

**Cardinals: College of**, 490-92

**Caribbean Sea**, 717

**Carlsbad, N. Mex.**, 171, 537

**Carlsbad Caverns**, 724

**Carlsen, Capt. Henrik Kurt**, 399

**Carnegie Corporation**, 749

**Carnegie Endowment**, 749

**Carnegie Institute**, 276

**Carnival season**, 496

**Carol (Rumania)**, 689

**Caroline Islands**, 183

**Carpenters: Number**, 233

**Carriers: Domestic traffic**, 792

**Carson City, Nev.**, 170

**Carthage, 744****Cartoons:**

First colored, 748

Pulitzer Prizes, 506

Caucasica Conference, 415

Case Bill, 298

Casper, Wyo., 179

Caspian Sea, 721

Casualties: War, 308-10

Catalogs: Postal rate, 312

Caterpillar Club: First member, 516

Cathedrals: European, 732, 733

Catholic Churches, 483

See also Roman Catholic Church

**Cattle:**

Prices: farm, 786

Production: U. S., 787

Production: world, 777

Caucasoids, 481

Caves and Caverns, 724

Cedar Rapids, Iowa, 215

Celebes, 645, 717

Cellophone: Invention, 479

Celluloid: Invention, 479

Cemeteries: National, 273

**Census:**

Congressional apportionments, 292

Established, 359

See also Population

Centare, 470

Centigrade scale, 473

**Central America:**

Emigration: to U. S., 226

Map, 150

Central Powers (WW I), 428

Cermak, Anton J., 342

**Ceylon:**

General information, 584-85

Agriculture: rating, 778

Birth rate, 233

Currency: Par value, 805

Death rate, 233

Diplomats: U. S., 341

Trade: with U. S., 801

**Chad, 627**

Area &amp; population, 623

Chain (meas.), 474

**Chain stores:**

Sales, 790

United States, 766

Chairmen: National Committees, 330

Chalons, Battle of, 744

Chamber of Commerce, U. S. 776

Chamberlain, Neville, 562

Chambers, Whittaker, 399

ChAMPLAIN, Lake: Battle of, 748

Channel Islands, 568

Area &amp; population, 561

Chapel Hill, N. C., 546

Chaplin, Charles: Barred from U. S., 399

Charge accounts, 784

Charlemagne, 744

Charles I: Beheaded, 744

Charleston, S. C., 175

Area, 215

Climate, 213

Longitude &amp; latitude, 537

Magnetic declination, 537

National Convention, 280

Population, 215

Time of day, 537

Charleston, W. Va., 215, 537

Charlotte, N. C.:

Area, 215

Longitude &amp; latitude, 537

Magnetic declination, 537

Mint Museum, 277

Newspaper: leading, 246

**Population, 215**

Time of day, 537

Charter: U. N., 382-84

Charter Oak, 189

Chattanooga, Tenn., 215

**Cheese:**

Consumption, 783

Prices: retail, 783

Production: world, 777

**Chemical industry:**

Chemists: number, 232

Establishments, 789

Exports, 802

Hours worked, 798

Prices, 790

Production, 785

Wages, 798

**Chemistry:**

Discoveries, 479-80

Elements, 477-78

Nobel Prizes, 14, 501-04

Cherbourg, France, 415

Chesapeake Bay, 208

Chess, 845, 911

Chester, Pa., 215

Chesterfield Islands, 633

Cheyenne, Wyo., 179, 213, 537

Chiang Kai-shek, 601-02

**Chicago:**

General information, 186

Buildings: tallest, 742

Climate, 213

Deaths: motor-vehicle, 234

Fire (1871), 739

Government, 200

Longitude &amp; latitude, 537

Magnetic declination, 537

Museums, 274-75

National Conventions, 280

Newspapers: leading, 246

Planetarium, 546

Population: growth, 215

Population: world rank, 737

Time of day, 537

Zoos, 731

**Chickens:**

On farms, 787

Prices: farm, 786

**Chief Justices:**

List, 339

Salary, 329

**Children:**

Child labor, 294

Children's hospitals, 241

U. N. Fund for Children, 299

Children's Crusade, 744

**Chile:**

General information, 599-601

Birth rate, 233

Currency: Par value, 805

Death rate, 233

Diplomats: U. S., 341

Earthquake (1939), 738

Holiday: national, 736

International Bank, 805

Minerals: rating, 776

Trade, 801, 803

United Nations, 377

Volcanoes, 723

**China:**

General information, 601-05

Agriculture: rating, 777, 778

Aid: legislation, 299, 300

Armed forces: rating, 780

Birth rate, 779

Currency: Par value, 805

Diplomats: U. S., 341

Emigration: to U. S., 226

Exploration, 713

Floods, 738

Japan: invaded by, 412

Korean War, 420-21

**Life expectancy, 231**

Minerals: rating, 776, 777

Nine Power Treaty, 295

Structures, 733-34

Trade, 801, 803

United Nations, 377, 423

U. S. intervention, 329

Wall of China, 733, 745

World War II, 309

**Chinese (U. S.):**

Births, 229

Chinatown: San Francisco, 199

Population: by state, 221

See also Nonwhite races

Chinese-Japanese War, 744

Chinese Turkestan. See Sinkiang

Chiropractors: Number, 232

Chosen. See Korea

Christ. See Jesus

Christian Science, 485

**Christianity:**

Christians: number, 482

Roman Empire, 744

See also individual churches

Christmas, 498, 499

Christmas Island, 586, 596

Chromite: Production 776

Chromosphere, 542

**Chronology:**

Atomic energy, 426

Chinese-Japanese War, 412

Cold War, 416-19

Depression &amp; Recovery, 400-03

Ethiopian War, 412

Historical &amp; News events, 744-48

Korean War, 419-21

League of Nations, 422

Rise of Hitler, 408-11

Soviet Russia, 406-08

Spanish Civil War, 412

United Nations, 422-23

U. S. in World Affairs, 403-06

World War II, 413-16

Years 1933-1953, 397-99

Year 1954, 8-13

See also History

**Chunking, China:**

Fire (1949), 739

Longitude &amp; latitude, 536

Population, 601

Time of day, 536

**Church of England, 495****Churches:**

Leading: U. S., 482-86

Number: by city, 183-99

See also Religion

Churchill, Winston, 562

"Blood, toil, tears, sweat," 413

Knighthood, 399

Terms as Prime Minister, 120

Cicero, Ill., 215

Cincinnati, Ohio:

General information, 186

Art Museum, 276

Building: tallest, 742

Deaths: motor-vehicle, 234

Government, 200

Longitude &amp; latitude, 537

Magnetic declination, 537

National Conventions, 280

Newspapers: leading, 246

Population: growth, 215

Time of day, 537

**Circle: Formulas, 472**

Circular measure, 472

**Circumference:**

Formula for, 472

Of Earth, 544

- Circus Museum, 278  
 Cirrhosis of liver, 228  
 Cities (U. S.):  
   General information, 183-200  
   Area, 215-18  
   Area; largest city, 191  
   "City of Brotherly Love," 195  
   Climate, 213  
   Deaths: motor-vehicle, 234  
   Easternmost city, 166  
   First chartered city, 166  
   Governments, 200  
   Largest: by state, 159-79  
   Longitude & latitude, 537  
   Magnetic declinations, 537  
   Mileages between, 202-05  
   Newspapers: leading, 246-47  
   Number, 223  
   Oldest city in U. S., 163  
   Population (1910-50), 215-18  
   Southernmost city, 192  
   Time of day, 537  
 Cities (world):  
   Capital: highest, 557  
   Largest, 737  
   Longitude & latitude, 536  
   Mileages between, 206-07  
   Population, 737  
   Time of day, 536  
 Citizenship (U. S.):  
   Defined, 367  
   Loss of, 302  
   See also Naturalization  
 City Managers: Salaries, 200  
 City of Flint (ship), 413  
 Civil Aeronautics Board, 332, 334  
 Civil-defense bill, 300  
 Civil rights, 366  
 Civil Service Commission, 333, 334  
 Civil War, American, 350-51  
   Casualties, 308  
   Events, 744  
 Civil War, Spanish, 412  
 Civilian Conservation Corps, 296, 401  
 Clark, Gen. Mark W., 420  
 Clarksburg, W. Va., 178  
 Classification:  
   Man: by races, 481  
   Plants & animals, 480  
   Selective Service, 305  
 Clay, Henry, 282  
 Clay industry:  
   Hours worked, 798  
   Production, 785  
   Wages, 798  
 Clayton Antitrust Act, 294  
 Cleaning plants: Number, 793  
 Clerical workers: Number, 232  
 Clergymen: Number, 232  
 Cleveland, Grover:  
   Biography, 323  
   Cabinets, 337  
   Elections, 282, 291  
   Family, 330  
   Hall of Fame, 514  
   Minority President, 370  
   Nominations, 280  
 Cleveland, Ohio:  
   General information, 186-87  
   Building: tallest, 742  
   Climate, 213  
   Deaths: motor-vehicle, 234  
   Government, 200  
   Longitude & latitude, 537  
   Magnetic declination, 537  
   Museums, 276  
   National Convention, 280  
   Newspapers: leading, 246  
   Population: growth, 215  
   Time of day, 537  
 Cleveland Heights, Ohio, 215  
 Clifton, N. J., 215  
 Climate:  
   Cities: U. S., 213  
   World: extremes, 725-26  
 Clinton Engineer Works, 176  
 Clock, pendulum: Invention, 479  
 Cloisters (museum), 274  
 Cloth: Measures, 474  
 Clothing industry:  
   Consumer spending, 780  
   Establishments, 789  
   Hours worked, 798  
   Prices: index, 783  
   Production: index, 785  
   Sales, 790, 791  
   Wages, 798  
 Clovis, N. Mex., 171  
 Coal industry:  
   Coal products: manufacture, 785  
   Exports, 802  
   Hours worked, 798, 799  
   Leading state, 178  
   Mine: first, 761  
   NATO vs. Soviet bloc, 418  
   Production: U. S., 760, 761, 785, 788  
   Production: world, 776  
   Strikes, 402  
   Wages, 798, 799  
 Coast Guard (U. S.):  
   Academy, 304  
   Allowances, 306  
   Education: government funds, 257  
   History, 305  
   Insignia, 306  
   Officers, 306, 334  
   Pay, 306, 307  
   Personnel: by year, 309  
   Ranks, 306, 307  
 Coastline: U. S.: by state, 214  
 Cochín-China, 631-32  
 Cocoa:  
   Consumption, 783  
   Imports, 802  
 Coconut Grove: Fire, 739  
 Code, Justinian, 746  
 Code Napoleon, 744  
 Code of Hammurabi, 744  
 Coeducation: First, 748  
 Coffee:  
   Consumption, 783  
   Imports, 802  
   Prices: retail, 783  
   Rationing, 402  
 Cohn, Roy M.: Resigns, 12  
 Coke: Production, 788  
 Cold War, 416-19, 428  
 Collect-on-delivery mail, 313  
 College of Cardinals, 490-92  
 Colleges:  
   Accredited, 257-71  
   Ancient & modern, 727-29  
   Degrees: academic, 255-56  
   Graduates, 254  
   Junior colleges, 253  
   Libraries, 73  
   Presidents, 257-71  
   Students surviving through, 253  
   United States, 257-71  
 Cologne, Germany, 415, 634  
 Colombia:  
   General information, 605-06  
   Agriculture: rating, 777  
   Currency: Par value, 805  
   Diplomats: U. S., 341  
   Holiday: national, 736  
   International Bank, 805  
   Minerals: rating, 777  
   Trade, 801, 803  
   United Nations, 377  
 Volcanoes, 723  
 Color photography: Invention, 479  
 Colorado:  
   General information, 160-61  
   Abbreviation, 212  
   Agriculture: statistics, 787  
   Altitudes, 209  
   Births: number, 229  
   Cities & towns, 223  
   Congress: members, 29, 31  
   Congress: representation, 292  
   Deaths: motor-vehicle, 235  
   Deaths: number, 229  
   Divorces: statistics, 238-39  
   Economy: statistics, 781  
   Education: statistics, 251, 252  
   Elections: statistics, 284-91  
   Executions: method, 242  
   Government, 201  
   Highest, lowest points, 209  
   Holidays, 499  
   Hospitals: number, 241  
   Map, 158  
   Marriages: statistics, 236  
   Motor vehicles: deaths, 235  
   Motor vehicles: laws, 244  
   Mountain peaks, 210  
   Newspapers: number, 245  
   Places: by size, 223  
   Population: by sex, 222  
   Population: density, 218  
   Population: growth, 219-20  
   Population: marital status, 237  
   Population: racial, 221  
   Population: 21 yrs. & over, 222  
   Time zone, 151  
   Unemployment: compensation, 95  
   Voting: qualifications, 293  
 Colorado River, 211, 713, 721  
 Colorado Springs, Colo., 161, 276  
 Colosseum, 732  
 Colossus: Rhodes, 714  
 Columbia, S. C., 215, 537  
 Columbia Broadcasting System, 248  
 Columbia River, 211, 721  
 Columbus, Christopher, 713, 714  
 Columbus, Ga., 215  
 Columbus, Ohio:  
   General information, 187  
   Building: tallest, 742  
   Climate, 213  
   Deaths: motor-vehicle, 234  
   Government, 200  
   Longitude & latitude, 537  
   Magnetic declination, 537  
   Newspaper: leading, 246  
   Population: growth, 215  
   Time of day, 537  
 Columbus Day, 497, 499  
 Combustion: Nature of, 480  
 Comets, 542-43  
 Cominform. See Communist Information Bureau  
 Comintern. See Third International  
 Commerce. See Economy  
 Commerce, U. S. Dept. of, 332, 334  
   Education: funds, 257  
   Secretaries, 337-38  
 Commerce & Labor, U. S., Dept. of, 337  
 Commissioner: Baseball, 807  
 Commissions: City, 200  
 Committees:  
   Congressional, 30



**Committees—(cont.)**

National: chairmen, 330  
 Commonwealth Fund, 749  
 Commonwealth of Nations, 560-96

*See also individual nations*

**Communications:**

Countries: leading, 779  
 Establishments, 784  
 FCC, 332, 334, 401  
 ITU, 380

**Communism:**

Communist nations, 428  
 Hollywood inquiry, 398  
 Pope excommunicates Catholic Communists, 418  
*See also Union of S. S. R.*

**Communist bloc:**

Economic strength, 417  
 Nations, 140-43  
 Trade, 803

**Communist Information Bureau:**

Denounces Tito, 418  
 U.S.S.R., 705

**Communist International, 746****Communist Manifesto, 744****Communist party (U. S.):**

Election statistics, 285-87  
 11 leaders guilty, 399  
 Internal Security Act of 1950, 300

Outlawed, 302

13 leaders convicted, 399

Como, Lake, 656

Comoro Islands, 628-29, 722

Companies: Billion-dollar, 799

Composers: Opera, 123-24

Compromise of 1850, 744

Comstock Lode, 170

Concert music. *See* Music

Concord, N. H., 170, 213

Conditioned reflex, 480

Cone: Volume, 472

Confederate Memorial Day, 499

Confederate States of America:

Cabinet, 338  
 Capital, 197

Capital: temporary, 159

Flag, 373

President & Vice Presidents, 338

Proclaimed, 745

*See also Civil War; Secession*

Conferences: WW II, 343-45

Confucianists: Number, 482

Congo. *See* Belgian Congo;

Middle Congo

Congregational Churches, 485

Congregational organizations:

Jewish, 496

**Congress (U. S.):**

Assembling time, 360, 369  
 Bills & treaties since 1900, 294-302

Committees, 30

84th: members, 29-33

First meeting, 371

Library of Congress, 730

Party standings, 29

Powers, 361-62

Shooting in House, 9

*See also House; Senate*

Congress of Berlin, 747

Congress of Industrial Organizations, 774-75

Formed, 401

Leading unions, 775

UMW secedes, 402

Congress of Vienna, 744

Congresses, Continental, 371

Connecticut:

General information, 161

Abbreviation, 212

Agriculture: statistics, 787

Altitudes, 209

Births: number, 229

Cities & towns, 223

Congress: members, 29, 31

Congress: representation, 292

Constitution: ratified, 358

Deaths: motor-vehicle, 235

Deaths: number, 229

Divorces: statistics, 238-39

Economy: statistics, 781

Education: statistics, 251, 252

Elections: statistics, 284-91

Executions: method, 242

Government, 201

Highest, lowest points, 209

Holidays, 499

Hospitals: number, 241

Map, 152

Marriages: statistics, 236

Motor vehicles: deaths, 235

Motor vehicles: laws, 244

Newspapers: number, 245

Places: by size, 223

Population: by sex, 222

Population: density, 218

Population: growth, 219-20

Population: marital status, 237

Population: racial, 221

Population: 21 yrs. & over, 222

Shore line, 214

Time zone, 151

Unemployment: compensation, 95

Voting: qualifications, 293

Connecticut River, 211

Conspiracy: Penalty, 302

Constantinople, 745

*See also Istanbul*

Constitution (U. S.):

Amendment procedure, 365

Dates ratified, 358

History, 349

Text, 358-69

Constitutional Union party, 282

Constitutions (state):

Dates adopted, 159-79

First state to have, 161

Construction industry:

Activity: by type & year, 795

Development: U. S., 763-64

Employment, 795, 798

Establishments, 784

Expenditure, 780

Hours worked, 799

Houses built, 796

Injuries, 800

Materials: establishments, 789

Materials: sales, 790, 791

Wages, 795, 799

Consumers:

Credit, 784

In America, 754-55

Prices, 757, 783

Spending, 755, 780

Continental Congresses, 371

Continental Divide, 224

Continental Flag, 373

Continents. *See* individual continents

Contract bridge:

Champions, 904

Systems, 33-34

Controls: Price & wage, 402

Convalescent hospitals, 241

Conventions: National, 279, 280

Conversion factors (math.), 475

Converter: Bessemer, 479

Coolidge, Calvin:

Biography, 325

Cabinet, 338

Election, 283, 291

Family, 330

Nomination, 280

Co-operatives: Agricultural, 295, 296

Cooperstown, N. Y., 276, 277, 278

Copenhagen, Denmark, 611-12

Copernican theory, 480

Coplon, Judith, 399

Copper industry:

Production: U. S., 786

Production: world, 776

Copyrights: Procedure, 250

Coral Sea, Battle of, 415

Corcoran Gallery, 275

Corfu, 422

Corn:

Prices: farm, 786

Production: U. S., 787

Products: consumption, 783

Corning Glass Center, 276

Corona: Solar, 542

Corporations:

Assets & liabilities, 784

Billion-dollar, 799

Income tax, 88

Profits & taxes, 782

Taxes: collections, 796

Corpus Christi (holiday), 498

Corpus Christi, Tex., 215, 498

Corregidor, 414, 415

Corrigan, Douglas, 398

Corsica, 625

Corvallis, Oreg., 174

Costa Rica:

General information, 606-07

Birth rate, 233

Currency: Par value, 805

Death rate, 233

Diplomats: U. S., 341

Holiday: national, 736

Trade: with U. S., 801

United Nations, 377

Volcanoes, 723

Costello, Frank: Guilty, 399

Cotton Bowl (football), 844

Cotton gin: invention, 479

Cotton industry:

Consumption, 785

Exports, 802

Income: marketing, 788

Plantation: largest, 168

Prices: farm, 786

Production: U. S., 787

Production: world, 777-78

Council of Economic Advisers, 331, 333

Council of Europe, 418

Council of Nicaea, 745

Council of Trent, 745

Councils, City, 200

Counter Reformation, 745

Counterfeiting:

Arrests, 243

Prisoners: Federal, 242

Counties: Number by state, 159-79

Countries:

Area & population, 736

Highest country, 605

Political changes, 427

Rishes & resources, 776-80

World Wars I & II & Cold

War, 428

*See also individual countries*

**Court martial:** Cases, 242  
**Court of Justice, International,** 380  
**Court tennis,** 849, 906  
**Courts:**  
 Federal, 364  
 Federal: convictions, 242  
 States: highest, 201  
*See also* Supreme Court  
**Coventry, England,** 413  
**Covington, Ky.,** 215  
**Cowpens, Battle of,** 744  
**Cows: On farms,** 787  
**"Coxey's Army,"** 745  
**"Cradle of Liberty,"** 167  
**Craftsmen: Number,** 233  
**Cranston, R. I.,** 215  
**Crater Lake National Park,** 272  
**Craters: Meteor,** 546  
**Cream: Consumption,** 783  
**Crécy, Battle of,** 746  
**Credit: Consumer,** 784  
**Creed, American's,** 375  
**Crete,** 639-40  
**World War II,** 414  
**Crime:**  
 Arrests: number, 243  
 Executions: methods, 242  
 Kefauver Committee, 399  
 Major crimes, 243  
 Prisoners: Federal, 242  
**Crimean War,** 745  
**Critics: Awards,** 512-14  
**Crops. See Farming**  
**Crossword puzzle guide,** 96-124  
**Crucifixion of Christ,** 745  
**Crusades,** 745  
**Children's Crusade,** 744  
**Cuba:**  
 General information, 607-08  
 Agriculture: rating, 778  
 Currency: Par value, 805  
 Diplomats: U. S., 341  
 Holiday: national, 736  
 Minerals: rating, 776, 777  
 Trade, 801, 803  
 United Nations, 377  
**Cube: Volume,** 472  
**Cubes and Cube roots,** 475  
**Cubit,** 474  
**Cumberland, Md.,** 167  
**Curaçao,** 674  
**Curie, Marie,** 501  
**Curling (sport),** 896  
**Currency. See Money**  
**Currier Gallery,** 276  
**Curtis, Charles,** 284, 285  
**Curtis Cup,** 825  
**Custer massacre,** 745  
**Customs: Receipts,** 797  
**Cyanide: Invention,** 479  
**Cyclades,** 639  
**Cycling,** 865, 906  
**Cyclotron: Invention,** 479  
**Cylinder: Volume,** 472  
**Cyprus,** 585-86  
 Area & population, 561  
**Czars: Russia,** 122  
**Czechoslovakia:**  
 General information, 609-10  
 Agriculture: rating, 778  
 Birth rate, 233  
 Death rate, 233  
 Diplomats: U. S., 341  
 Emigration: to U. S., 226  
 German invasion, 411  
 Industry: rating, 779  
 Life expectancy, 231  
 Minerals: rating, 776, 777  
 Oats: jailed, 419  
 Trade: with U. S., 801  
 United Nations, 377  
 World War II, 309, 415

## — D —

**D-Day,** 415  
**Dachau concentration camp,** 416  
**Daguerreotype process,** 479  
**Dahomey,** 623  
**Dairy products:**  
 Exports, 802  
 Income: marketing, 788  
 Prices: retail, 783  
**Dakar,** 627  
**Dallas, Tex.:**  
 General information, 187  
 Area, 215  
 Deaths: motor-vehicle, 234  
 Government, 200  
 Longitude & latitude, 537  
 Magnetic declination, 537  
 Newspapers: leading, 246  
 Population: growth, 215  
 Time of day, 537  
**Dalton, John: Theory,** 480  
**Dams: World,** 734  
**Dance halls: Number,** 793  
**Dancers: Number,** 222  
**Dante: Divine Comedy,** 745  
**Danube,** 720  
**Danzig:**  
 Annexed by Germany, 413  
 World War II, 416  
**Dardanelles,** 702  
**Dare, Virginia,** 748  
**Date-line,** 523  
**Davenport, Iowa,** 215, 276  
**Davis, Jefferson,** 338  
**Davis Cup,** 826  
**Dawes, Charles G.,** 283  
**Dawes Plan,** 410  
**Daylight saving time,** 522  
**Days: Sideral & solar,** 545  
**Dayton, Ohio,** 215, 246  
**Dead Sea: Elevation,** 715  
**Deaf persons: Education,** 254  
**Dean, Maj. Gen. William F.,** 421  
**Dearborn, Mich.,** 215  
**Death rates:**  
 Accidental: transportation, 234  
 By age, sex & year, 232  
 By cause, 228  
 By country, 233  
 By state, 229  
 By year, 224  
 Lowest: by country, 779  
 Motor-vehicle: by city, 234  
 Motor-vehicle: by state, 235  
**Death Valley: Elevation,** 715  
**Deaths:**  
 Accidental: by year & type, 234  
 Accidental: frequency, 228  
 Airplanes: 1st death, 516  
 Assassinations, 342  
 By sex & year, 224  
 By state, 229  
 Casualties: war, 308-10  
 Famous persons, 457-69  
 Motor-vehicle: by city, 234  
 Motor-vehicle: by state, 235  
 Motor-vehicle: by year & type, 235  
**Debs, Eugene V.,** 283, 747  
**Debts:**  
 Bonded: by city, 183-99  
 Public, 368, 771, 795  
 World War I, 296  
**Decatur, Ill.,** 215  
**Decimals: Fraction equivalents,** 474  
**Declaration of Independence,** 355-57

**Declarations of war. See World War II under individual countries**  
**Decoration Day,** 497, 499  
**Defense, U. S. Dept. of,** 331, 334  
 Education: funds, 257  
 Expenditures, 797  
 Legislation, 299, 300  
 Secretaries, 338  
**Defense bonds,** 402  
**Defense Mobilization, Office of,** 331, 333  
**Degrees: Academic,** 255-56  
**Delaware:**  
 General information, 161-62  
 Abbreviation, 212  
 Agriculture: statistics, 787  
 Altitudes, 209  
 Births: number, 229  
 Cities & towns, 223  
 Coast line, 214  
 Congress: members, 29, 31  
 Congress: representation, 292  
 Constitution: ratified, 358  
 Deaths: motor-vehicle, 235  
 Deaths: number, 229  
 Divorces: statistics, 238-39  
 Economy: statistics, 781  
 Education: Negroes, 254  
 Education: statistics, 251, 252  
 Elections: statistics, 284-91  
 Executions: method, 242  
 Government, 201  
 Highest, lowest points, 209  
 Holidays, 499  
 Hospitals: number, 241  
 Map, 152  
 Marriages: statistics, 236  
 Motor vehicles: deaths, 235  
 Motor vehicles: laws, 244  
 Newspapers: number, 245  
 Places: by size, 223  
 Population: by sex, 222  
 Population: density, 218  
 Population: growth, 219-20  
 Population: marital status, 237  
 Population: racial, 221  
 Population: 21 yrs. & over, 222  
 Shore line, 214  
 Time zone, 151  
 Unemployment: compensation, 95  
 Voting: qualifications, 293  
**Delaware Bay,** 208  
**Delegates: National Conventions,** 279  
**Delinquents: Education,** 254  
**Democratic party:**  
 Congress: strength, 29  
 Elections: Presidential, 281-91  
 National Committee: chairmen and address, 330  
 National Conventions, 279, 280  
 State voting longest for, 177  
**Democratic Republican party,** 281  
**De Molay,** 750  
**Denmark:**  
 General information, 611-13  
 Agriculture: rating, 777, 778  
 Birth rate, 233  
 Currency: Par value, 805  
 Death rate, 233  
 Diplomats: U. S., 341  
 ECA: allotments, 805  
 Emigration: to U. S., 226  
 Industry: production, 800  
 International Bank, 805

## Denmark—(cont.)

Life expectancy, 231  
MSA: allotments, 805  
Telephones: rating, 779  
Trade: rating, 779  
Trade: with U. S., 801  
United Nations, 377  
World War II, 309, 413

## Density:

Chemical elements, 477-78  
Population. *See* Population

Dental school: Oldest, 184

Dentists: Number, 232

## Denver, Colo.:

General information, 187-88  
Climate, 213  
Deaths: motor-vehicle, 234  
Government, 200  
Longitude & latitude, 537  
Magnetic declination, 537  
Museums, 277  
National Convention, 280  
Newspapers: leading, 246  
Population: growth, 215  
Time of day, 537

Department stores, 766, 791

Departments, Executive, 331-34

Deportations: Number, 214

Deposits. *See* Banks

Depression: U. S., 400-03, 768-70

## Depths:

Lakes, 721  
Oceans & seas, 717

## Deserts: Principal, 719

## Des Moines, Iowa:

General information, 188  
Climate, 213  
Government, 200  
Longitude & latitude, 537  
Magnetic declination, 537  
Newspapers: leading, 246  
Population: growth, 215  
Time of day, 537

Destroyers: Traded to Britain, 405

Detective agencies: Number, 793

## Detroit, Mich.:

General information, 188-89  
Building: tallest, 742  
Climate, 213  
Deaths: motor-vehicle, 234  
Government, 200  
Longitude & latitude, 537  
Magnetic declination, 537  
Museums, 277  
Newspapers: leading, 246  
Population: growth, 215  
Race riots, 398  
Time of day, 537

Deuterium: Discovery, 480

de Valera, Eamon, 650-51

Devil's Island, 630

Dewey, Thomas E.:

Candidate for President, 288, 289

Governor of N. Y., 171

Nominations for President, 280

Diabetes mellitus: Deaths, 228

Diamonds: N. A. mine, 160

Diesel engine: Invention, 479

Dingley Tariff, 351

Dioceses: Roman Catholic, 489-90

Diode: Invention, 479

Dionne quintuplets, 397

Emilie dies, 12

Diplomats: To & from U. S., 341-42

## Diphtheria:

Antitoxin, 480  
Death rates, 228  
Schick test, 480

## Directory (France), 745

Dirigible: First, 515

Disasters, 738-41

## Discoveries:

Chemical elements, 477-78  
Historical, 713-14  
Scientific, 479-80

Disorderly conduct: Arrests, 243

Displaced persons: Legislation, 299

## Distances:

Between cities, 202-07  
Northern hemisphere, 136-37

## Distribution, 765-67

## District of Columbia:

General information, 162  
Altitudes, 209  
Births: number, 229  
Bonus army, 400  
Climate, 213  
Congress: legislation, 362  
Deaths: motor-vehicle, 234  
Deaths: number, 229  
Divorces: statistics, 238-39  
Economy: statistics, 781  
Education: Negroes, 254  
Education: statistics, 251, 252

Education: U. S. funds, 257

Executions: method, 242

Holidays, 499

Hospitals: number, 241

Marriages: statistics, 236

Motor vehicles: laws, 244

Museums, 275

National Convention delegates, 279

Newspapers: leading, 247

Newspapers: number, 245

Population: by sex, 222

Population: density, 218

Population: growth, 218

Population: marital status, 237

Population: racial, 221

Population: 21 yrs. & over, 222

Taxes, 214

Time zone, 151

Unemployment: compensation, 95

White House, 340

Zoo, 731

Divine Comedy of Dante, 745

## Divorces:

"Divorce capital," 170  
Divorced persons: number, 237

Laws: by state, 238-39

Number: by state, 239

Number: by year, 240

Dnieper Dam: Blown up, 414

Dodecanese, 640, 657

Dogs: Shows, 861

Dollar: Gold value cut (1934), 401

Dollfuss, Englebert, 410

Domestic Allotment Act, 297

Domestic workers: Number, 798

Dominican Order: Founded, 745

## Dominican Republic:

General information, 613  
Currency: Par value, 805  
Diplomats: U. S., 341  
Holiday: national, 736  
Trade: with U. S., 801  
United Nations, 377  
U. S. intervention, 329

Dorr Rebellion, 745

Douay Version of Bible, 744

Douglas, Ariz., 159

Dover, Del., 161

Draft. *See* Selective Service

Draftsmen: Number, 232

Drama. *See* Theater

Dred Scott case, 745

Dresden, Germany, 637

Dreyfus case, 745

## Driving:

Licenses, 244  
Mileages between cities, 202-03

Speed limits, 244

Drought: Midwest, 397

Drowning: Deaths, 234

## Drug stores:

Leading, 791  
Number, 789  
Sales, 790, 791

## Drugs:

Arrests, 243  
Laws: Federal prisoners, 242  
Pure Food & Drug Act, 294  
Wholesale, 790  
*See also* Narcotics

Drunkennes: Arrests, 243

## Dry goods:

Sales, 790  
Stores: leading, 791  
Wholesale, 789

Dublin, Ireland, 650

Dubuque, Iowa, 537

Duck pins, 856, 906

Dulles, John Foster, 338

Duluth, Minn., 168, 215, 537

Dunkerque evacuation, 413

Dunkers, 485

Durham, N. C., 215

Dutch East Indies. *See* Indonesia

Dutch Guiana. *See* Surinam

Dynamite: Invention, 479

Dynamo: Invention, 479

## — E —

Earnings: Manufacturing, 756

Earth (planet), 544, 545

Earthquakes: Famous, 738

East Africa High Commission, 569

East Chicago, Ind., 215

East China Sea, 717

East Germany. *See* German Democratic Republic

East North Central States:

Economy: statistics, 781  
Population: 21 yrs. & over, 222

East Orange, N. J., 215

East St. Louis, Ill., 215

East South Central States:

Economy: statistics, 781  
Population: 21 yrs. & over, 222

Easter Island, 601

Easter Rebellion, 745

Easter Sunday, 496, 498

Eastern Orthodox Churches, 482, 483

Eastport, Maine, 537

Eating places. *See* Restaurants

Eclipses (1955), 545

Economic Advisers, Council of, 331, 333

Economic and Social Council. *See* United Nations

Economic Cooperation Administration:

Allotments, 805

*See also* Foreign aid

Economics, 751-805

American agriculture, 762-63

American consumer, 754-55



- Banking & Finance, 772-74  
 Boom & Depression, 768-70  
 Chronology, 400-03  
 Construction, 763-64  
 Distribution, 765-67  
 Foreign trade, 767-68  
 Government income, 771-72  
 Government spending, 771-72  
 Labor Organizations, 774-75  
 Manufacturing, 756-61  
 Our natural resources, 761-62  
 Riches and resources, 776-80  
 Statistics, 780-805  
 Trade organizations, 775-76  
 Transportation, 764-65  
 Where We Stand Today, 753  
 Where we Started, 754
- Ecuador:**  
 General information, 614-15  
 Currency: Par value, 805  
 Diplomats: U. S., 341  
 Earthquake (1949), 738  
 Holiday: national, 736  
 Trade: with U. S., 801  
 United Nations, 377  
 Volcanoes, 723
- Edict of Nantes, 745**
- Edinburgh, Scotland, 560**
- Education, 251-71**  
 Colleges, accredited, 257-71  
 Colleges: statistics, 253  
 Construction, 795  
 Consumer spending, 780  
 Degrees: academic, 256  
 Employment, 795  
 Federal aid, 257  
 Negroes, 254  
 Private schools, 253, 254  
 Public schools, 251-55  
 School attendance laws, 252  
 Technical, 252, 760-61  
 UNESCO, 380  
 Veterans, 257, 310  
 Vocational schools, 252
- Edward VIII (England), 398, 562**
- Eggs:**  
 Consumption, 783  
 Exports, 802  
 Income: marketing, 788  
 Prices, 783, 786
- Egypt:**  
 General information, 615-17  
 Agriculture: rating, 778  
 Ancient empire, 726  
 Currency: Par value, 805  
 Diplomats: U. S., 341  
 Funeral boat discovered, 10  
 Life expectancy, 231  
 Minerals: rating, 777  
 Pyramids, 714  
 Structures, 732  
 Trade, 803  
 United Nations, 377  
 World War II, 413, 415
- Egyptian mythology, 119**
- Eighteenth Amendment, 368**
- Einstein, Albert:**  
 Arrives in U. S., 397  
 Nobel prize, 502  
 Relativity, 480  
 Theorem, 472
- Eire. See Ireland**
- Eisenhower, Dwight D.:**  
 Biography, 327  
 Cabinet, 338  
 Election, 290  
 Family, 330  
 Nomination, 280  
 Record (1954), 22  
 Supreme Commander of North Atlantic Treaty, 418
- To command European invasion, 415
- Elba: Napoleon exiled to, 746**
- Elbe: Americans & Russians meet, 416**
- Elbert, Mt., 210**
- El Centro, Calif., 537**
- Election:**  
 Election Day, 497, 498, 499  
 Presidential (1789-1952), 281-91  
 Presidential: procedure, 279, 367  
 1954 elections, 27-28  
*See also Voting*
- Electoral College:**  
 Procedure, 279, 367  
 Vote (1789-1952), 281-91, 354
- Electoral Commission, 283**
- Electric railways: Traffic, 792**
- Electrical industry:**  
 Appliances: sales, 785  
 Customers, 781  
 Development: U. S., 761-62  
 Electricians: number, 233  
 Electricity in homes, 764  
 Establishments, 789  
 Farms with electricity, 762  
 Hours worked, 798, 799  
 Machinery, 802  
 Prices: index, 783  
 Production: U. S., 760, 761-62, 789  
 Production: world, 779  
 Sales, 790  
 Wages, 798, 799
- Electricity:**  
 Cost of operation, 472  
 Inventions & discoveries, 479-80
- Electrocution:**  
 First, 748  
 States using, 242
- Electromagnet: Invention, 479**
- Electromagnetic waves, 480**
- Electron: Discovery, 480**
- Electron microscope, 479**
- Electroplating process, 479**
- Elementary schools: Statistics, 251-53**
- Elements: Chemical, 477-78**
- Elevations. See Altitudes**
- Elevator: Invention, 479**
- Eleventh Amendment, 366**
- Elizabeth II (England), 562**  
 Becomes Queen, 399  
 Crowned, 399  
 Marriage, 398
- Elizabeth, N. J., 216**
- Elkins Act, 294**
- Eiko, Nev., 170**
- Elks (assn.), 749**
- Ell (meas.), 474**
- Ellesmere (Canada), 717**
- Ellice Islands. See Gilbert**
- El Paso, Tex.:**  
 Area, 215  
 Climate, 213  
 Longitude & latitude, 537  
 Magnetic declination, 537  
 Population, 215  
 Time of day, 537
- El Salvador:**  
 General information, 691  
 Birth rate, 233  
 Currency: Par value, 805  
 Death rate, 233  
 Diplomats: U. S., 341  
 Holiday: national, 736  
 International Bank, 805  
 Trade: with U. S., 801  
 United Nations, 377  
 Volcanoes, 726
- Elsmere, Del., 161**
- Emancipation Proclamation, 744**
- Embezzlement:**  
 Arrests, 243  
 Prisoners, federal, 242
- Emergency Quota Act, 295**
- Emigration: From U. S., 214**  
*See also Immigration*
- Empires: Ancient, 726**
- Employment:**  
 Agencies: number, 793  
 Agricultural: by state, 781  
 And national income, 759  
 By industry & year, 798  
 Countries: leading, 779  
 Manufacturing: by state, 781  
 State employees, 795  
 U. S. labor force, 756
- Enderbury, 181, 596**
- Energy: Conversion from matter, 472**  
*See also Atomic energy*
- Engineers: Number, 232**
- England:**  
 Area, 562  
 Church of England, 495  
 Emigration: to U. S., 226  
 Life expectancy, 231  
 Population, 562  
 Rulers, 119-20  
*See also Great Britain*
- Enid, Okla., 173**
- Eniwetok, 183, 426**
- Entertainment. See Amusement**
- Ephesus: Temple, 714**
- Epileptic persons: Education, 254**
- Epiphany, 496**
- Epsom Derby, 881-82**
- Equinoxes, 543**
- "Era of Good Feeling," 317**
- Erie, Lake, 208, 721**  
 Battle of, 748
- Erie, Pa., 216**
- Erie Canal, 172**
- Eritrea, 619**
- Eruptions. See Volcanoes**
- Espionage: Penalty, 302**
- Establishments: Business, 784, 789, 793**
- Estate tax, 89, 796**
- Estes Park, 188**
- Estonia:**  
 General information, 618  
 Diplomats: U. S., 341  
 Emigration: to U. S., 226  
*See also Union of S. S. R.*
- Ether: First use, 480**
- Ethiopia:**  
 General information, 618-19  
 Agriculture: rating, 777  
 Currency: Par value, 805  
 Diplomats: U. S., 341  
 International Bank, 805  
 Italian invasion, 411-12  
 Trade: rating, 779  
 United Nations, 377
- Etna, Mt., 722**
- Eugene, Oreg., 174, 537**
- Euphrates, 720**
- Europa (ship), 743**
- Europe:**  
 Area, 715  
 Dimensions, 715  
 Elevations, 715  
 Emigration: to U. S., 226  
 Exploration, 713  
 Floods (1953), 738  
 Industrial production, 800  
 Map, 140-141  
 Maps (1914, 1938, 1942), 407-09  
 Population, 715  
 Religions, 482

**Europe—(cont.)**

Structures: famous, 732-33  
 Volcano: only active, 722  
**Europe, Council of**, 418  
**European army**, 419  
**European Coal-Steel Community**, 419  
**European Defense Community**  
 Treaty, 26, 419, 428  
**European Recovery Program**, 299, 300, 805  
**Evangelical churches**, 485-86  
**Evans, Mt.**, 210  
**Evanston, Ill.**, 216  
**Evansville, Ind.**, 216  
**Evening schools**, 252  
**Evening stars (1955)**, 538-41  
**Events. See Chronology**  
**Everest, Mt.**, 716  
 Climbed, 399  
**Everglades National Park**, 292  
**Evolution**, 480  
 Scopes trial, 747  
**Excess-profits taxes**, 302, 796  
**Excise taxes**, 302, 796  
**Execution:**  
 First, 748  
 Methods, 242  
**Executive Depts. (U. S.)**, 331-34  
 Secretaries: salaries, 329  
**Exodus 1947 (ship)**, 398  
**Expansion of U. S.**, 208  
**Expenditures:**  
 Advertising, 793  
 By cities, 183-99  
 By year, 780  
 Consumer, 755, 780  
 Educational, 251, 252, 254  
 Government, 770, 796, 797  
 Gross national product, 780  
 States, 159-79  
**Explorations**, 713-14  
**Explosions: Famous**, 739  
**Exports:**  
 By country, 803  
 Countries: leading, 779  
 U. S.: by commodity, 802  
 U. S.: by year, 802-04  
**Exposition Park**, 191  
**Extradition: Between states**, 364-65

**F**

**F.M. See Frequency modulation**  
**Faeroe Islands**, 612  
**Fahrenheit scale**, 473  
**Failures: Business**, 784  
**Fair Trade Acts of 1952**, 301, 403  
**Fairbanks, Alaska**, 179  
**Falkland Islands**, 582  
 Area & population, 561  
**Fall (1955)**, 544  
**Fall River, Mass.**, 216  
**Falling bodies:**  
 Law: discovery, 480  
 Speed & distance, 472  
**Falls: Deaths from**, 234  
**Families:**  
 Incomes, 752  
 U. S.: number by size, 223  
 With telephones, 781  
**Famous persons:**  
 Who Was Who, 457-69  
 Who's Who, 429-56  
**Faneuil Hall**, 185  
**Fargo, N. Dak.**, 172, 537  
**Farmer-Labor party**, 283  
**Farmers' Museum**, 277  
**Farms and Farming:**  
 AAA, 296, 298

**Animals: domestic**, 787  
**Construction**, 795  
**Co-operatives**, 295, 296  
**Development: U. S.**, 762-63  
**Farmers: number**, 232  
**Farms with electricity**, 762  
**Federal farm board**, 296  
**Income**, 762, 782, 786, 788  
**Legislation**, 294-302  
**Loans: government**, 294, 295, 296  
**Mortgages**, 296, 297  
**Number**, 786  
**Population**, 786  
**Prices: and farm value**, 788  
**Prices: index**, 790  
**Prices: parity**, 786  
**Products: establishments**, 789  
**Property**, 786  
**Soil conservation**, 297, 298  
**Tenant farmers**, 763  
**Farouk I (Egypt)**, 615  
**Fascism: Italy**, 654-55  
**Fat Tuesday**, 496  
**Fates (myth.)**, 113  
**Father's Day**, 499  
**Fathom (meas.)**, 474  
**Fats:**  
 Consumption, 783  
 Exports & imports, 802  
**Fawkes, Guy**, 745  
**Feasts: Jewish**, 496-98  
**Federal Communications Commission**, 332, 334, 401  
**Federal courts:**  
 Convictions, 242  
 Jurisdiction, 364  
**Federal Deposit Insurance Corporation**, 296  
**Federal Farm Bankruptcy Act**, 297  
**Federal Farm Loan Act**, 294  
**Federal Housing Administration**, 297  
**Federal Intermediate Credit Act**, 295  
**Federal Reserve Board**, 332, 334  
**Federal Reserve System**, 772-74  
 Act: violators, 242  
 Assets & liabilities, 794  
 Banks: number, 794  
 Legislation, 294, 296, 297  
 Notes: in circulation, 794  
**Federal Securities Act**, 296  
**Federal Trade Commission**, 294, 332, 334  
**Federal Water Power Act**, 295  
**Federalist party**, 281  
**Fels Planetarium**, 546  
**Females. See Women**  
**Fencing**, 857, 897, 900  
**Fenimore House**, 277  
**Feudalism**, 745  
**Field Foundation**, 749  
**Field Museum**, 275  
**Fifteenth Amendment**, 368  
**Fighters (planes)**, 520, 521  
**Figure skating**, 858  
**Fiji**, 561, 593-94  
**Filament: Tungsten**, 479  
**Filling stations:**  
 Number, 789  
 Sales, 791  
**Fillmore, Millard:**  
 Biography, 320  
 Cabinet, 336  
 Family, 330  
**Films: See Motion pictures**  
**Finance:**  
 And banking, 772-74  
 Employment, 798  
 Establishments, 784  
**Fingal's Cave**, 724

**Finland:**

**General information**, 619-21  
**Birth rate**, 233  
**Currency: Par value**, 805  
**Death rate**, 233  
**Diplomats: U. S.**, 341  
**Emigration: to U. S.**, 226  
**International Bank**, 805  
**Life expectancy**, 231  
**Trade**, 801, 803  
**Trade: rating**, 779  
**U. S. lends \$10 million**, 405  
**World War II**, 309, 413, 415  
**Fireballs**, 546  
**Fires: Famous**, 739  
**"Fireside Chat": First**, 400  
**Firms: Number**, 784, 789, 793  
**First Fruits, Feast of**, 497  
**First International**, 746  
**First:**  
 Aviation, 515-17  
 Boxing, 841  
 In America, 748-49  
**Fishing:**  
 Imports, 802  
 World records, 862  
**Five and Ten Cents Store**, 748  
**Five-Year Plans**, 407  
**Flag:**  
 Confederate, 373  
 U. S.: etiquette, 373-75  
 U. S.: Flag Day, 497, 499  
 U. S.: history, 373  
 U. S.: Pledge to, 375  
**Flagstaff, Ariz.**, 537  
**Flax:**  
 Flaxseed: prices, 786  
 Imports, 802  
**Flights: Famous**, 515-17  
**Flint, Mich.**, 216  
**Sit-down strike**, 401  
**Floods: Famous**, 738  
**Florence, Italy**, 729, 730  
**Florida:**  
 General information, 162-63  
 Abbreviation, 212  
 Agriculture: statistics, 787  
 Altitudes, 209  
 Births: number, 229  
 Cities & towns, 223  
 Coastline, 214  
 Congress: members, 29, 31  
 Congress: representation, 292  
 Deaths: motor-vehicle, 235  
 Deaths: number, 229  
 Divorces: statistics, 238-39  
 Economy: statistics, 781  
 Education: Negroes, 254  
 Education: statistics, 251, 252  
 Elections: statistics, 284-91  
 Executions: method, 242  
 Government, 201  
 Highest, lowest points, 209  
 Holidays, 499  
 Hospitals: number, 241  
 Hurricanes, 739  
 Map, 153  
 Marriages: statistics, 236  
 Motor vehicles: laws, 244  
 Motor vehicles: deaths, 235  
 Newspapers: number, 245  
 Places: by size, 223  
 Population: by sex, 222  
 Population: density, 218  
 Population: growth, 219-20  
 Population: marital status, 237  
 Population: racial, 221  
 Population: 21 yrs. & over, 222  
 Shore line, 214  
 Time zone, 151

- Unemployment: compensation, 95  
 Voting: qualifications, 293  
**Flour:**  
 Consumption, 783  
 Prices: retail, 783  
*See also* Wheat  
**Flowers:** State, 159-79  
 Fly and bait casting, 910  
 Flying Enterprise (ship), 399  
 Flying shuttle: invention, 479  
 Folk art museum, 277  
**Food and Food Industry:**  
 Calories, 476  
 Consumer spending, 780  
 Consumption, 783  
 Establishments, 789  
 Exports, 802  
 FAO, 379  
 Grocery stores: leading, 791  
 Hermetic sealing, 479  
 Hours worked, 798  
 Imports, 802  
 Income: marketing, 788  
 Prices, 783, 788, 790  
 Prices: index, 783  
 Production: U. S., 785  
 Production: world, 777-78  
 Pure Food and Drug Act, 294  
 Rationing, 402  
 Sales, 790, 791  
 Vitamins, 476  
 Wages, 798  
 Worktime needed to buy, 782  
**Football, 843-45**  
 Bowl games, 843-44  
 Clubs: number, 793  
 College records: best, 892  
 Famous series: records, 844  
 History, 843  
 Measurements, 864  
 Professional, 845  
**Ford Foundation, 749**  
**Fordney-McCumber Tariff, 295**  
**Foreign affairs of U. S., 403-06**  
**Foreign aid:**  
 Legislation, 298, 299, 300, 302  
 United States, 768, 769  
*See also* Marshall plan  
**Foreign-born: in U. S., 227**  
**Foreign phrases, 110**  
**Foreign trade: U. S., 767-68**  
**Forestry:**  
 Countries: leading, 778  
 Resources: U. S., 209  
 State forests, 159-79  
**Forgery:**  
 Arrests, 243  
 Prisoners: federal, 242  
**Formosa, 604**  
**Forms of address, 61-63**  
**Formulas: Common, 472**  
**Fort Dearborn, 186**  
**Fort McHenry, 184**  
**Fort Smith, Ark., 160**  
**Fort Sumter, 175**  
**Fort Wayne, 216, 246**  
**Fort Worth, Tex., 213, 216, 246**  
**Foundations, 749-50**  
**Fountain pen: invention, 479**  
**Fourteen Points, 404**  
**Fourteenth Amendment, 367**  
**Fractions: Decimal equivalents, 475**  
**France:**  
 General information, 621-33  
 Agriculture: rating, 777, 778  
 Airlines: rating, 779  
 Armed forces: rating, 780  
 Birth rate, 233  
 Currency: Par value, 805  
 Death rate, 233  
 Diplomats: U. S., 341  
 ECA: allotments, 805  
 Emigration: to U. S., 226  
 Floods (1953), 738  
 Industry: production, 800  
 Industry: rating, 779  
 International Bank, 805  
 Labor: purchasing power, 782  
 League of Nations, 422  
 Life expectancy, 231  
 MSA: allotments, 805  
 Merchant fleet: rating, 779  
 Minerals: rating, 776, 777  
 Museums, 730, 731  
 Rulers, 121  
 Structures, 732-33  
 Trade, 801, 803  
 Trade: rating, 779  
 United Nations, 377  
 Universities, 728  
 World War II, 309, 413-16  
**Franciscan Order: Founded, 745**  
**Franco, Francisco, 412, 693**  
**Franco-Prussian War, 745**  
**Franklin Institute, 275**  
**Fraternity: First, 747**  
**Fraud, 242, 243**  
**Frazier-Lemke Act, 297**  
**Frederick, Md., 167**  
**Freedom of press, 745**  
**Freedoms: Constitutional, 366**  
**Freeman's oath, 293**  
**Freemasonry, 749-50**  
**Freer Gallery, 275**  
**Freezing point: Water, 473**  
**Freight, 792**  
**Freight ton, 474**  
**French and Indian War, 747**  
**French Equatorial Africa, 627**  
 Agriculture: rating, 778  
 Area & population, 623  
**French Guiana. *See* Guiana**  
**French Guinea. *See* Guinea**  
**French India. *See* India**  
**French Morocco. *See* Morocco**  
**French Pacific Settlements, 632-33**  
 Area & population, 623  
**French Revolution, 745**  
**French Somaliland. *See* Somaliland**  
**French Sudan. *See* Sudan**  
**French West Africa, 627-28**  
 Agriculture: rating, 778  
 Area & population, 623  
**Frequency modulation:**  
 Invention, 479  
 Stations: by city, 183-99  
 Stations: U. S., 248  
**Fresno, Calif., 216, 537**  
**Frick Collection, 274**  
**Friendly Islands. *See* Tonga**  
**Friends (Quakers), 486**  
**Fruit:**  
 Consumption, 783  
 Exports & imports, 802  
 Income: marketing, 788  
 Prices, 783, 786  
**Fuchs, Dr. Klaus, 399**  
**Fuel:**  
 Electricity source, 789  
 Prices, 790  
 Production, 785, 788  
*See also* Coal; Gas; Oil  
**Fujiyama, 716**  
**"Fundamental Orders," 161**  
**Furies (myth.), 113**  
**Furniture industry:**  
 Establishments, 789  
 Furniture center of U. S., 168  
 Hours worked, 798  
 Prices: index, 790  
 Production: index, 785  
 Sales, 791  
 Stores: leading, 791  
 Wages, 798  
**Furs: Imports, 802**

## G

- GI Bill of Rights, 310**  
**Gabon, 623**  
**Gadsden, Ala., 216**  
**Gadsden Purchase, 208**  
**Galilee, Sea of, 654**  
**Gallon: Defined, 472**  
**Galveston, Tex., 216**  
**Gambia, 570-71**  
 Area & population, 561  
**Gambier, 632-33**  
**Gambling:**  
 Arrests, 243  
 Nevada, 170  
**Gandhi, Mohandas K., 587**  
 Assassination, 398  
**Garden City, Kans., 537**  
**Gardner Museum, 277**  
**Garfield, James A.,**  
 Biography, 322  
 Cabinet, 336  
 Election, 282  
 Family, 330  
 Minority President, 370  
 Nomination, 280  
**Garner, John N., 285, 286**  
**Gary, Ind., 216**  
**Gas Industry:**  
 Earnings & hours worked, 799  
 Kerr bill, 300  
 Production, 788  
**Gases: Laws: discovery, 480**  
**Gasoline:**  
 Exports, 802  
 Rationing: start, 402  
 Sales, 791  
 Tax: by state, 244  
**General Assembly. *See* United Nations**  
**General Motors:**  
 Signs with UAW, 403  
 Wage increase, 402  
**General Sherman Tree, 160**  
**Generals: Armed Forces, 334**  
**Geneva, Switzerland, 696**  
**Genoa, Italy, 654**  
**Geodetic center: North America, 165**  
**Geographic centers:**  
 North America, 173  
 States, 159-79  
 United States, 208  
**Geographical mile, 474**  
**Geography:**  
 U. S.: boundaries, 208  
 U. S.: coastline, 214  
 U. S.: highest & lowest points, 208  
 U. S.: map, 151  
 U. S.: mountain peaks, 210  
 U. S.: National Park System, 271-73  
 U. S.: rivers, 211-12  
 World: caves & caverns, 724  
 World: deserts, 719  
 World: geysers, 724-25  
 World: highest & lowest points, 715  
 World: islands, 717  
 World: lakes, 721  
 World: mountain peaks, 716  
 World: oceans & seas, 717  
 World: rivers, 720-21  
 World: volcanoes, 722-23  
 World: waterfalls, 718



George VI (England), 398, 399  
 George II (Greece), 638-39  
 George Washington Bridge, 735  
 Georgia:

**General information, 163**

Abbreviation, 212  
 Agriculture: statistics, 787  
 Altitudes, 209  
 Births: number, 229  
 Cities & towns, 223  
 Coastline, 214  
 Congress: members, 29, 31  
 Congress: representation, 292  
 Constitution: ratified, 358  
 Deaths: motor-vehicle, 235  
 Deaths: number, 229  
 Divorces: statistics, 238-39  
 Economy: statistics, 781  
 Education: Negroes, 254  
 Education: statistics, 251, 252  
 Elections: statistics, 284-91  
 Executions: method, 242  
 Government, 201  
 Highest, lowest points, 209  
 Holidays, 499  
 Hospitals: number, 241  
 Map, 153  
 Marriages: statistics, 236  
 Motor vehicles: deaths, 235  
 Motor vehicles: laws, 244  
 Newspapers: number, 245  
 Places: by size, 223  
 Population: by sex, 222  
 Population: density, 218  
 Population: growth, 219-20  
 Population: marital status, 237  
 Population: racial, 221  
 Population: 21 yrs. & over, 222  
 Sherman's March, 744  
 Shore line, 214  
 Time zone, 151  
 Tornadoes (1936), 739  
 Unemployment: compensation, 95  
 Voting: qualifications, 293  
 Germ warfare: Russian charge, 421

German Democratic Republic:  
 General information, 637  
 Agriculture: rating, 777, 778

German Federal Republic:  
 General information, 634-36  
 Agriculture: rating, 777, 778  
 Birth rate, 233  
 Currency: Par value, 805  
 Death rate, 233  
 Diplomats: U. S., 341  
 ECA: allotments, 805  
 Employment: rating, 779  
 Industry: production, 800  
 Industry: rating, 779  
 MSA: allotments, 805  
 Minerals: rating, 776, 777  
 Peace contract (1952), 301  
 Population: density, 715  
 Trade, 801, 803  
 Trade: rating, 779

Germany:  
 General information, 633-38  
 Armed forces (1914-45), 412  
 Chronology (1919-39), 408-11

Emigration: to U. S., 226  
 Farben explosion, 739  
 Floods (1953), 738  
 Labor: purchasing power, 782

League of Nations, 422  
 Libraries, 729  
 Life expectancy, 231

Maps: 1914-1953, 407-09  
 Museums, 730-31  
 Occupation: plans, 343-44  
 Peace resolution (1951), 301  
 Rulers, 122  
 3-power pact (1940), 413  
 U.S.S.R.: nonaggression pact, 407  
 Universities, 728  
 Western European Union, 26  
 World War II, 298, 301, 309, 413-16  
 Zoos, 731  
 See also Hitler

Gestation periods of animals, 719  
 Gettysburg, Battle of, 744  
 Gettysburg Address, 370  
 Geysters, 724-25  
 Gibraltar, 568  
 Area & population, 561  
 Gift tax, 89, 796  
 Gilbert and Ellice Islands, 596  
 Area & population, 561  
 World War II, 414, 415  
 Girl Scouts of the U.S.A., 750  
 Glacier National Park, 272  
 Glasgow, Scotland, 560  
 Glass Industry:  
 Hours worked, 798  
 Production, 785  
 Wages, 798  
 Glass-Owen Bill, 294  
 Glass-Steagall Banking Act, 296  
 Glendale, Calif., 216  
 Gobi Desert, 719  
 Gods & Goddesses, 111-19  
 Godwin Austen (mt.), 716  
 Goering, Hermann: Suicide, 416  
 Gold:  
 Carat: defined, 474  
 Embargoed, 400  
 Gold Reserve Act, 296  
 Gold rush, 745  
 Mine: richest, 175  
 Production: world, 777  
 Value of dollar cut (1934), 401  
 Gold Coast, 571  
 Area & population, 561  
 Minerals: rating, 777  
 Gold Repeal Joint Resolution, 401  
 Gold standard: U. S. goes off, 401  
 Golden Gate Bridge, 735  
 Golf, 821-25  
 1954 champions, 908  
 Amateur, 822, 824  
 British champions, 823  
 College, 824, 900  
 Course, highest, 171  
 Cups, 825  
 History, 821  
 Measurements, 864  
 Professional, 823, 908  
 Public Links, 822  
 U. S. Open, 821  
 Good Friday, 496, 498, 499  
 Good-neighbor policy, 353, 404  
 Gorgons (myth.), 113  
 Gotland, 696  
 Government:  
 Cities: mayors, etc., 200  
 States: employment, 795  
 States: governors, etc., 201  
 U. S.: education, 257  
 U. S.: employment, 798  
 U. S.: Executive Depts., 331-34  
 U. S.: expenditure, 770, 796, 797  
 U. S.: funds to states, 257  
 U. S.: income, 771  
 U. S.: independent agencies, 332-34

U. S.: public debt, 795  
 U. S.: receipts, 796, 797  
 U. S.: salaries, 782  
 U. S.: securities, 784  
 U. S.: tax revenues, 796  
 U. S.: Who's who, 455-56  
 Governors:  
 First woman governor, 749  
 States: names, 159-79  
 States: terms & salaries, 201  
 Governors General: Canada, 579  
 Graces (myth.), 113  
 Graduates, 251-54  
 Graf Spee, 413  
 Grain:  
 Exports, 802  
 Income: marketing, 788  
 NATO vs. Soviet bloc, 418  
 Gram: Defined, 471  
 Grand Canyon National Park, 272  
 Grand Coulee Dam, 178  
 Grand Forks, N. Dak., 172  
 Grand Island, Neb., 169  
 Grand Junction, Colo., 537  
 Grand National Steeplechase, 883  
 Grand Rapids, Mich., 168  
 Area & population, 215  
 Longitude & latitude, 537  
 Magnetic declination, 537  
 Time of day, 537  
 Grand Teton National Park, 272  
 Grant, Ulysses S.:  
 Biography, 321-22  
 Cabinet, 336  
 Elections, 282  
 Family, 330  
 Hall of Fame, 514  
 Nominations, 280  
 Tomb, 734  
 Gravitation: Discovery of law of, 480  
 Gray-Snyder case, 747  
 Great Arabian Desert, 719  
 Great Australian Desert, 719  
 Great Britain (isl.): Area, 717  
 Great Britain and Northern Ireland, United Kingdom of:  
 General information, 560-68  
 Agriculture: rating, 777, 778  
 Air raid: first, 516  
 Airlines: rating, 779  
 Armed forces (1914-53), 412  
 Armed forces: rating, 780  
 Atomic bomb, 426  
 Birth rate, 233  
 Church of England, 495  
 Death rate, 233  
 Destroyers from U. S., 405  
 Diplomats: U. S., 341  
 ECA allotments, 805  
 Emigration: to U. S., 226  
 Floods, 738  
 Industry: production, 800  
 Industry: rating, 779  
 League of Nations, 422  
 Life expectancy, 231  
 Loan: U. S., 298  
 MSA: allotments, 805  
 Merchant fleet: rating, 779  
 Minerals: rating, 776, 777  
 Museums, 730-31  
 Nationalizes coal mines, 398  
 Prime ministers, 120  
 Robot bombing, 415  
 Rulers, 119-20  
 Telephones: rating, 779  
 Trade, 801, 803  
 U.S.S.R.: pact (1941), 414  
 United Nations, 377  
 Universities, 728  
 World War II, 309, 413-16  
 Zoos, 732  
 Great Falls, Mont., 169

Great Lakes, 721  
 Great Plague (London), 746  
 Great Rebellion (England), 745  
 Great Salt Lake, 177, 721  
 Great Salt Lake Desert, 719  
 Great Smoky Mts. Natl. Park, 272  
 Great Wall of China, 745  
 "Great White Way," 194  
 Greece:  
   General information, 638-40  
   Aid bills: U. S., 299, 300  
   Ancient, 726  
   Currency: Par value, 805  
   Diplomats: U. S., 341  
   ECA: allotments, 805  
   Earthquake (1953), 738  
   Emigration: to U. S., 226  
   Industry: production, 800  
   Industry: rating, 779  
   League of Nations, 422  
   Life expectancy, 231  
   MSA: allotments, 805  
   Minerals: rating, 776  
   Structures, 732  
   Trade: with U. S., 801  
   United Nations, 376, 377  
   World War II, 309, 413, 414  
 Greek letters, 96-106  
 Greek mythology, 111-17  
 Greek Orthodox Church, 483  
 Greeley, Colo., 161  
 Greeley, Horace, 280, 282  
 Green Bay, Wis., 216  
 Greenback party, 282  
 Greenland, 612-13, 713, 717  
   U. S. bases, 405  
 Greenlease kidnapping, 399  
 Greensboro, N. C., 216  
 Greenville, Miss., 168  
 Greenville, S. C., 216  
 Greenwich, England, 522  
 Greer (destroyer), 405  
 Gregorian Calendar, 745  
 Griffith Planetarium, 546  
 Groceries:  
   Sales, 791  
   Stores: leading, 791  
   Wholesale: establishments, 789  
   See also Food  
 Gross (meas.), 474  
 Gross national product, 753, 780  
 Grounds for divorce, 238  
 Guadalcanal, 596  
   World War II, 415  
 Guadalupe Hidalgo, Treaty of, 746  
 Guadeloupe, 630  
   Area & population, 623  
 Guam, 182  
   Executions: method, 242  
   World War II, 414, 415  
 Guatemala:  
   General information, 640  
   Currency: Par value, 805  
   Diplomats: U. S., 341  
   Holiday: national, 736  
   Trade: with U. S., 801  
   United Nations, 377  
   Volcanoes, 723  
 Guernsey (Isl.), 568  
 Guggenheim Memorial Foundation, 750  
 Guggenheim Museum, 274  
 Guiana, British, 577  
   Area & population, 561  
   Minerals: rating, 776  
 Guiana, Dutch. See Surinam  
 Guiana, French, 630  
   Area & population, 623  
 Guinea, French, 623  
 Guinea, Portuguese, 688  
   Area & population, 687

Guinea, Spanish, 694  
 Gulf of Mexico. See Mexico,  
   Gulf of  
 Guncotton: Invention, 479  
 Gunpowder Plot, 745  
 Gustavus VI (Sweden), 695  
 Gutenberg: Printing, 479  
 Gymnastics, 896, 900  
 Gyrocompass: Invention, 479  
 Gyroscope: Invention, 479

## — H —

Haakon, VII, 676  
 Hagerstown, Md., 167  
 Hague, The, Netherlands, 672  
 Haile Selassie, 618  
 Hailstones: Large, 726  
 Hainan, 603  
 Haiti:  
   General information, 641, 715  
   Currency: Par value, 805  
   Diplomats: U. S., 341  
   Holiday: national, 736  
   Hurricane (1935), 739  
   Trade: with U. S., 801  
   United Nations, 377  
   U. S. intervention, 329  
 Halicarnassus: Mausoleum, 714  
 Hall of Fame:  
   Baseball, 276, 817  
   Great Americans, 514  
   Hockey, 852  
 Halley's Comet, 542-43  
 Ham: Prices, 783  
 Hambletonian, 850  
 Hamburg, Germany, 634  
 Hamilton, Alexander, 335  
   Duel with Burr, 745  
 Hamilton, Ohio, 216  
 Hammar skjöld, Dag, 423  
 Hammond, Ind., 216  
 Hammurabi, Code of, 744  
 Hampton Roads, Port of, 177  
 Hand (meas.), 474  
 Handball, 895  
 Hanford Engineer Works, 178  
 Hanging: States using, 242  
 Hanging Gardens, 714  
 Hanukkah, 498  
 Harbor: Largest man-made, 160  
 Harding, Warren G.:  
   Biography, 325  
   Cabinet, 337  
   Election, 283, 291  
   Family, 330  
   Nomination, 280  
 Hardware Industry:  
   Establishments, 789  
   Hours worked, 798  
   Sales, 790, 791  
   Wages, 798  
 Harmsworth Trophy, 878  
 Harness racing, 850-51  
 Harpers Ferry: Raid, 744  
 Harrisburg, Pa.:  
   Area, 216  
   Climate, 213  
   Government, 200  
   Newspapers: leading, 246  
   Population, 216  
 Harrison, Benjamin:  
   Biography, 323  
   Cabinet, 336  
   Election, 282, 291  
   Family, 330  
   Minority President, 370  
   Nominations, 280  
 Harrison, William Henry:  
   Biography, 318  
   Cabinet, 335

Election, 281  
   Family, 330  
 Hartford, Conn.:  
   General information, 189  
   Climate, 213  
   Government, 200  
   Newspaper: leading, 246  
   Population: growth, 216  
   Wadsworth Athenaeum, 278  
 Harvard Observatory, 546  
 Harvard University, 729  
 Harvest, Feast of, 497  
 Hashemite Kingdom. See Jordan  
 Hastings, Battle of, 745  
 Hastings, Nebr., 169  
 Hattiesburg, Miss., 168  
 Hauptmann, Bruno Richard, 398  
 Haute Volta, 627  
   Area & population, 623  
 Havana, Cuba, 607-08  
 Havre, Mont., 537  
 Hawaii:  
   General information, 180  
   Agriculture: rating, 778  
   Congress: member, 32  
   Executions: method, 242  
   Holidays, 499  
   National Convention delegates, 279  
   Statehood, 302  
   Unemployment: compensation, 95  
   U. S. intervention, 329  
   Volcanoes, 722-23  
 Hawaii National Park, 272  
 Hawes-Cutting Bill, 296  
 Hawley-Smoot Tariff, 296  
 Hay-Bunau, Varilla Treaty, 294  
 Hay industry:  
   Income: marketing, 788  
   Prices: farm, 786  
 Hay-Pauncefote Treaty, 294  
 Hayden Planetarium, 546  
 Hayes, Rutherford B.:  
   Biography, 322  
   Cabinet, 336  
   Election, 282  
   Family, 330  
   Minority President, 370  
   Nomination, 280  
 Headline History of Our Times, 395-428  
 Health:  
   Services: employment, 795  
   WHO, 380  
 Health, Education and Welfare,  
   U. S. Dept. of, 322, 334  
 Heard Museum, 277  
 Heart disease: Death rates, 228  
 Heavy hydrogen: Discovery, 480  
 Hebrew letters, 96-106  
 Hebrides, 566  
 Hectare, 470  
 Hegira, 745  
 Hejaz, 692  
 Helena, Mont., 169, 213, 537  
 Helicopters:  
   First, 517  
   First transatlantic flight, 517  
   Invention, 479  
   Leonardo da Vinci, 515  
   Records, 519  
   Types, 520, 521  
 Heliocentric theory, 480  
 Helium:  
   Discovered on sun, 480  
   First use in balloons, 516  
   Only plant in U. S., 176  
 Hell Gate Bridge, 735  
 Helsinki, Finland, 619-21  
   World War II, 413  
 Hemingway, Ernest: Crash, 8

**Hemp:** Imports, 802  
**Hepburn Rate Bill,** 294  
**Hercules:** Labors of, 113-14  
**Heredity laws:** Discovery, 480  
**Hermetic sealing,** 479  
**Herron Museum,** 277  
**Hess, Rudolf:** Flight, 414  
**Hexagon:** Area, 472  
**Heye Foundation,** 274  
**Hides.** *See* Leather  
**High schools:** Statistics, 251-54  
**Highways:**  
   Construction, 795  
   Employment, 795  
   Oldest highway in U. S., 171  
**Himalayas,** 671  
**Himmler, Heinrich:** Suicide, 416  
**Hindenburg, Paul von,** 410, 634  
**Hindenburg (Zeppelin):** Burns, 741  
**Hindus:** Number, 482  
**Hirohito,** 657-59  
**Hiroshima, Japan,** 426  
**Hispanic Society,** 274  
**Hispaniola:** Area, 717  
**Hiss, Alger,** 399  
**Historic Sites, National,** 273  
**Historical Parks, National,** 273  
**History:**  
   Ancient empires, 726  
   Events: ancient to modern, 744-48  
   Firsts in America, 748-49  
   Headline History of Our Times, 395-428  
   Historical & News events, 744-48  
   Pulitzer prizes in, 508-09  
   United States, 348-54  
   *See also* Chronology  
**Hitler, Adolf,** 634  
   Rise to power, 408-11  
   Wounded in bomb plot, 398  
**Hoboken, N. J.,** 216  
**Hockey,** 852  
   1954 champions & records, 893-94  
   Amateur, 894  
   College, 900  
   Hall of Fame, 852  
   History, 852  
   Measurements, 864  
   Professional, 852  
   Stanley Cup, 852  
**Hogs:**  
   Prices: farm, 786  
   Production: U. S., 787  
   Production: world, 787  
**Hogshhead (meas.),** 474  
**Hokkaido:** Area, 717  
**Hole:** Deepest, 176  
**Holidays:**  
   American countries, 736  
   Flag display, 373-74  
   Religious & secular, 496-99  
**Holland.** *See* Netherlands  
**Holly:** Christmas, 498  
**Hollywood:** Communism, 398  
**Hollywood Gold Cup,** 884  
**Holmes, Oliver Wendell,** 339  
**Holy Alliance,** 745  
**Holy Roman Empire,** 745  
**Holy Saturday,** 498  
**Holyoke, Mass.,** 216  
**Home Owners Refinancing Act,** 296  
**Homes:**  
   Equipment in, 752, 764  
   Ownership, 765  
   *See also* Housing  
**Homestake (mine),** 175  
**Homicides:**  
   Arrests, 243

Death rates, 228  
 Number, 243  
**Honduras:**  
   General information, 642  
   Currency: Par value, 805  
   Diplomats: U. S., 341  
   Holiday: national, 736  
   Minerals: rating, 777  
   Trade: with U. S., 801  
   United Nations, 377  
**Honduras, British,** 577  
   Area & population, 561  
**Hong Kong,** 586  
   Area & population, 561  
   Trade, 803  
   Typhoon (1906), 739  
   World War II, 414  
**Honolulu, Hawaii:**  
   General information, 189  
   Government, 200  
   Longitude & latitude, 537  
   Newspaper: leading, 246  
   Time of day, 537  
**Honshu:** Area, 717  
**Hood, Mt.,** 716  
**Hood (warship),** 414  
**Hoover, Herbert:**  
   Biography, 325-26  
   Cabinet, 338  
   Election, 284  
   Family, 330  
   Nominations, 280  
**Hoover Dam,** 170  
**Houliam, Wash.,** 537  
**Hornet (carrier),** 414  
**Horse racing,** 879-90  
   Citation: record, 890  
   Government bars (1944), 402  
   History, 879  
   Horses, leading money winners, 890  
   Jockeys: leading, 890  
   Man O' War: record, 889  
   Owners: leading money winners, 890  
   Stakes: winners, 879-87  
   Thoroughbred Racing Assns., 889  
   Trainers: leading, 890  
   Wagering, 888  
   World records, 888  
**Horsepower:** Defined, 474  
**Horses:**  
   On farms, 787  
   Production: world, 778  
**Horsehoe pitching,** 909  
**Hospitals:**  
   Construction, 795  
   Employment, 795  
   Number, 241  
**Hot Springs, Ark.,** 160, 537  
**Hot Springs National Park,** 272  
**Hotels:**  
   Hours worked, 799  
   Number, 793  
   Wages, 799  
**House of Representatives:**  
   Apportionment, 292, 359, 367  
   Composition, 359  
   First woman member, 749  
   Members, 31-33  
   President elected by, 279  
   Qualifications, 359, 367  
   Salaries, 299, 329  
   Shooting (1954), 9  
   Speakers: list, 340  
   Terms, 31-33  
   Terms: end of, 369  
**Housing:**  
   Construction, 796  
   Consumer spending, 780, 783  
   Legislation, 296-302  
**Housing and Home Finance**

**Agency,** 332-33, 334  
**Houston, Tex.:**  
   General information, 189-90  
   Climate, 213  
   Deaths: motor-vehicle, 234  
   Government, 200  
   National Convention, 280  
   Newspapers: leading, 246  
   Population: growth, 216  
**Howland Island,** 181  
**Hudson Bay,** 713, 717  
**Hudson River,** 211, 713  
**Hughes, Charles E.:**  
   Nomination for President, 280  
   Secretary of State, 337, 338  
   Supreme Court, 339  
   Vote for President, 283  
**Huguenots,** 745, 747  
**Humidity:** U. S.: cities, 213  
**Hundred Years' War,** 746  
**Hungary:**  
   General information, 642-44  
   Birth rate, 233  
   Death rate, 233  
   Diplomats: U. S., 341  
   Emigration: to U. S., 226  
   Life expectancy, 231  
   Mindszenty sentenced, 418  
   Minerals: rating, 776  
   Vogeler sentenced, 418  
   World War II, 299, 309, 413, 415  
**Huntington, W. Va.,** 216  
**Huntington Library,** 277  
**Huron, Lake,** 721  
   U. S.: water area, 208  
**Huron, S. Dak.,** 175, 213  
**Hurricanes,** 26, 739  
**Hutchinson, Kans.,** 165  
**Hwang Ho,** 720  
**Hydroelectric plant:** Most powerful, 178  
**Hydrogen bomb,** 425-26  
**Hydroplanes:** Invention, 479

---

**Ibn Saud,** 692  
**Ice hockey.** *See* Hockey  
**Ice skating,** 858-59, 895  
**Iceland:**  
   General information, 644-45  
   Area, 717  
   Currency: Par value, 805  
   Diplomats: U. S., 341  
   ECA: allotments, 805  
   Exploration, 713  
   Geysers, 724  
   International Bank, 805  
   MSA: allotments, 805  
   Telephones: rating, 779  
   Trade with U. S., 801  
   United Nations, 377  
   U. S. occupies bases, 405  
   Volcanoes, 722  
**Idaho:**  
   General information, 163  
   Abbreviations, 212  
   Agriculture: statistics, 787  
   Altitudes, 209  
   Births: number, 229  
   Cities & towns, 223  
   Congress: members, 29, 31  
   Congress: representation, 292  
   Deaths: motor-vehicle, 235  
   Deaths: number, 229  
   Divorces: statistics, 238-39  
   Economy: statistics, 781  
   Education: statistics, 251, 252



- Elections: statistics, 284-91  
 Executions: method, 242  
 Government, 201  
 Highest, lowest points, 209  
 Holidays, 499  
 Hospitals: number, 241  
 Map, 157  
 Marriages: statistics, 236  
 Motor vehicles: deaths, 235  
 Motor vehicles: laws, 244  
 Newspapers: number, 245  
 Places: by size, 223  
 Population: by sex, 222  
 Population: density, 218  
 Population: growth, 219-20  
 Population: marital status, 237  
 Population: racial, 221  
 Population: 21 yrs. & over, 222  
 Time zone, 151  
 Unemployment: compensation, 95  
 Voting: qualifications, 293
- Idaho Falls, Idaho**, 163, 537  
**Idlewild Field**, 194  
**Inf.**, 694  
**Illinois:**  
 General information, 164  
 Agriculture: statistics, 787  
 Altitudes, 209  
 Births: number, 229  
 Cities & towns, 223  
 Congress: members, 29, 31  
 Congress: representation, 292  
 Deaths: motor-vehicle, 235  
 Deaths: number, 229  
 Divorces: statistics, 238-39  
 Economy: statistics, 781  
 Education: statistics, 251, 252  
 Elections: statistics, 284-91  
 Executions: method, 242  
 Government, 201  
 Holidays, 499  
 Hospitals: number, 241  
 Map, 156  
 Marriages: statistics, 236  
 Motor vehicles: laws, 244  
 Newspapers: number, 245  
 Population: by sex, 222  
 Population: density, 218  
 Population: growth, 219-20  
 Population: marital status, 237  
 Population: racial, 221  
 Population: 21 yrs & over, 222  
 Time zone, 151  
 Tornado (1925), 739  
 Unemployment: compensation, 95  
 Voting: qualifications, 293
- Immigration:**  
 Alien Registration Act, 298  
 Aliens: arrival, 214  
 By country of origin, 226  
 Displaced persons, 299  
 Laws: violators, 242  
 Legislation, 294  
 Literacy test, 294  
 Persons barred, 294  
 Quota, 295, 404  
 Racial bars ended, 301  
 Refugee Act, 302  
 To U. S.: by year, 228
- Impeachments**, 339, 360, 364  
**Imports:**  
 Countries: by year, 803  
 Countries: leading, 779  
 U. S.: by commodity, 802  
 U. S.: by year, 802-04  
**Inauguration date**, 279
- Incandescent lamp: Invention**, 479  
**Income:**  
 Agricultural, 762, 782, 786, 788  
 Families, 752  
 Farm, 762, 782, 786, 788  
 Government, 771  
 Insurance companies, 792  
 Manufacturing, 793  
 National, 759, 782  
 Per capita: by state, 781  
**Income tax:**  
 Federal: collections, 796  
 Federal: established, 368  
 Federal: legislation, 300, 301, 302  
 Federal: paid by corporations, 796  
 Federal: procedure, 83-92  
 Federal: violators, 242  
 Withholding tax, 89-90  
**Incubation period of animals**, 719  
**Independence, Declaration of**, 355-57  
**Independence Day**, 497, 499  
**Independence Hall**, 195  
**Independence party**, 283  
**India:**  
 General information, 587-91  
 Agriculture: rating, 777, 778  
 Armed forces: rating, 780  
 Birth rate, 233, 779  
 Currency: Par value, 805  
 Cyclones, 739  
 Death rate, 233  
 Diplomats: U. S., 341  
 Earthquakes, 738  
 Emigration: to U. S., 226  
 Exploration, 713  
 Industry: rating, 779  
 International Bank, 805  
 Life expectancy, 231  
 Loan: U. S. (1951), 301  
 Map, 135  
 Minerals: rating, 776, 777  
 Structures, 733  
 Trade, 801, 803  
 United Nations, 376, 377  
 Universities, 728  
 World War II, 309  
**India, French**, 631  
 Area & population, 623  
**India, Portuguese**, 688  
 Area & population, 687  
**Indian Ocean**, 717  
**Indiana:**  
 General information, 164  
 Abbreviation, 212  
 Agriculture: statistics, 787  
 Altitudes, 209  
 Births: number, 229  
 Cities & towns, 223  
 Congress: members, 29, 31  
 Congress: representation, 292  
 Deaths: motor-vehicle, 235  
 Deaths: number, 229  
 Divorces: statistics, 238-39  
 Economy: statistics, 781  
 Education: statistics, 251, 252  
 Elections: statistics, 284-91  
 Executions: method, 242  
 Government, 201  
 Highest, lowest points, 209  
 Holidays, 499  
 Hospitals: number, 241  
 Map, 156  
 Marriages: statistics, 236  
 Motor vehicles: deaths, 235  
 Motor vehicles: laws, 244  
 Newspapers: number, 245  
 Places: by size, 223
- Population: by sex, 222  
 Population: density, 218  
 Population: growth, 219-20  
 Population: marital status, 237  
 Population: racial, 221  
 Population: 21 yrs. & over, 222  
 Time zone, 151  
 Tornado (1925), 739  
 Unemployment: compensation, 95  
 Voting: qualifications, 293
- Indianapolis, Ind.:**  
 General information, 190  
 Auto race, 892, 905  
 Climate, 213  
 Deaths: motor-vehicle, 234  
 Government, 200  
 Herron Museum, 277  
 Longitude & latitude, 537  
 Magnetic declination, 537  
 Newspapers: leading, 246  
 Population: growth, 246  
 Time of day, 537
- Indians, American:**  
 Births, 229  
 Museum exhibits, 274-78  
 Population: by state, 221  
 Reservation: largest, 171  
 Schools: Federal, 253, 257
- Indo-China:**  
 General information, 631-32  
 Agriculture: rating, 778  
 Map, 135  
 Typhoon (1952), 739  
**Indo-Chinese War**, 23
- Indonesia:**  
 General information, 645-47  
 Agriculture: rating, 778  
 Currency: Par value, 341  
 Diplomats: U. S., 341  
 ECA: allotments, 805  
 Krakatoa's explosion, 723  
 Minerals: rating, 776, 777  
 MSA: allotments, 805  
 Trade, 801, 803  
 United Nations, 376, 377  
 Volcanoes, 723
- Induction: Electric**, 480  
**Indus**, 720  
**Industrial Revolution**, 746  
**Industry:**  
 Boom and depression, 768-70  
 Construction, 795  
 Countries: leading, 779  
 Establishments, 784, 789, 793  
 Failures: number, 784  
 Hospitals, 241  
 Hours worked, 798, 799  
 Injuries, 800  
 Production, 785, 786, 788, 789  
 Production: chart, 758  
 Production: indexes, 785  
 Production: West Europe, 800  
 Schools, 252  
 Wages, 798, 799  
 Workers: number, 798
- Infantile Paralysis, National Foundation for**, 750  
**Influenza: Death rates**, 228  
**Information Bureaus: Sports**, 806  
**Information Please**, 748  
**Ingathering, Feast of**, 497  
**Injuries: By industry**, 800  
**Inquisition**, 746  
**Insignia: Armed forces**, 306  
**Installment buying:**  
 Controls abolished, 403  
 Credit, 784  
 Sales: debt, 784  
**Insulin: Discovery**, 480

**Insull, Samuel, 398**

**Insurance:**

- Agents: number, 233
- Companies, 792
- Establishments, 784
- "Insurance Capital," 189
- Life insurance, 784, 792
- Old-age insurance, 92-93
- Savings: by year, 784
- Survivors' insurance, 92-93
- Unemployment insurance, 94-95

**Insured mail, 313**

**Intelligence testing, 480**

**Interest:**

- Public debt, 797
- Rates: cities, 794
- Simple, 473

**Inter-Governmental Maritime Consultative Organization, 379**

**Interior, U. S. Dept. of, 331-32, 334**

- Education: funds, 257
- Secretaries, 336-38

**Interior decorators: Number, 793**

**Internal revenue: Collections, 796, 797**

*See also* Income tax

**Internal Security Act of 1950, 300**

**International Bank, 379, 805**

**International Civil Aviation Organization, 379**

**International Court, 380, 422**

**International date-line, 523**

**International Folk Art, Museum of, 277**

**International Labour Organisation, 379-80**

**International Monetary Fund, 380**

**International Telecommunication Union, 380**

**International Trade Organization, 380**

**Internationals, 746**

**Interstate commerce:**

- ICC, 295, 333, 334
- Legislation, 294
- Thefts, 242

**Inventions, 479-80**

- American, 758-60
- Patents: procedure, 249

**Ionian Islands, 639**

**Iowa:**

- General information, 164-65
- Abbreviation, 212
- Agriculture: statistics, 787
- Altitudes, 209
- Births: number, 229
- Cities & towns, 223
- Congress: members, 29, 31
- Congress: representation, 292
- Deaths: motor-vehicle, 235
- Deaths: number, 229
- Divorces: statistics, 238-39
- Economy: statistics, 781
- Education: statistics, 251, 252
- Elections: statistics, 284-91
- Executions: method, 242
- Government, 201
- Highest, lowest points, 209
- Holidays, 499
- Hospitals: number, 241
- Map, 155
- Marriages: Statistics, 236
- Motor vehicles: deaths, 235
- Motor vehicles: laws, 244
- Newspapers: number, 245
- Places: by size, 223
- Population: by sex, 222
- Population: density, 218
- Population: growth, 219-20
- Population: marital status,

237

Population: racial, 221

Population: 21 yrs. & over, 222

Time zone, 151

Unemployment: compensation, 95

Voting: qualifications, 293

**Iran:**

General information, 647-49

Aid: legislation, 300

Diplomats: U. S., 341

League of Nations, 422

Trade, 801, 803

United Nations, 376, 377, 422

World War II, 414

**Iraq:**

General information, 649-50

Currency: Par value, 805

Diplomats: U. S., 341

International Bank, 805

Minerals: rating, 777

United Nations, 377

**Ireland:**

General information, 650-52

Birth rate, 233

Death rate, 233

Diplomats: U. S., 341

ECA: allotments, 805

Emigration: to U. S., 226

Industry: production, 800

Labor: purchasing power, 782

MSA: allotments, 805

Trading: rating, 779

**Ireland (isl.): Area, 717**

**Ireland, Northern, 567**

U. S. troops land in, 414

*See also* Great Britain

**Irish Free State. See Ireland**

**Iron Curtain countries: Map, 138-39**

**Iron industry:**

Exports, 802

Hours worked, 798

Production: U. S., 785, 786

Production: world, 777

Wages, 798

**Irvington, N. J., 216**

**Islam. See Mohammedanism**

**Islands: Areas, 717**

**Isle of Man, 567**

Area & population, 561

**Isle Royale National Park, 272**

**Isotopes, 477-78, 480**

**Israel:**

General information, 652-54

Birth & death rate, 233

Diplomats: U. S., 341

Map, 417

Trade, 803

United Nations, 377, 423

*See also* Palestine

**Israel (ancient): Kings, 109-10**

**Istanbul, Turkey, 700**

**Italian Somaliland. See Somalia**

**Italy:**

General information, 654-57

Agriculture: rating, 777, 778

Birth rate, 233

Corfu, 422

Currency: Par value, 805

Death rate, 233

Diplomats: U. S., 341

ECA: allotments, 805

Emigration: to U. S., 226

Ethiopian war, 411-12

Industry: production, 800

Industry: rating, 779

International Bank, 805

Labor: purchasing power, 782

League of Nations, 422

Libraries, 729

Life expectancy, 231

MSA: allotments, 805

Merchant fleet: rating, 779

Minerals: rating, 776

Museums, 730

Pact with Germany (1939), 411

Population: density, 715

Structures, 732

3-power pact (1940), 413

Trade, 801, 803

Trade: rating, 779

United Nations, 376

Universities, 727-28

Volcanoes, 722

World War II, 299, 309, 413-16

**Ivory Coast, 627**

Area & population, 623

**Iwo Jima, 183**

World War II, 415, 416



**Jackson, Andrew:**

Biography, 317-18

Cabinet, 335

Elections, 281

Family, 330

Hall of Fame, 514

**Jackson, Mich., 216**

**Jackson, Miss., 216, 537**

**Jackson, Tenn., 175**

**Jacksonville, Fla.:**

Area, 216

Longitude & latitude, 537

Magnetic declination, 537

Newspaper: leading, 246

Population, 216

Time of day, 537

**Jakarta, Indonesia, 645**

**Jamaica, 582**

Area & population, 561

**Jamestown, N. Dak., 172**

**Jamestown, Va., 713, 746, 747**

**Jan Mayen Island, 678, 722**

**Japan:**

General information, 657-60

Agriculture: rating, 777, 778

Anti-Comintern treaty, 407

Birth rate, 233

China: invasion of, 412

Currency: Par value, 805

Death rate, 233, 780

Denounces 1922 naval treaty, 404

Diplomats: U. S., 341

Earthquake (1923), 738

Emigration: to U. S., 226

Employment: rating, 779

Exploration, 713

Floods, 738

Hurricane (1934), 739

Industry: rating, 779

League of Nations, 422

Libraries, 729

Life expectancy, 231

Merchant fleet: rating, 779

Minerals: rating, 776, 777

Pact with U.S.S.R., 414

Panay sinking, 404

Population: density, 715

Surrender: terms, 344-45

3-power pact (1940), 413

Trade, 803

Trade: rating, 779

Treaty, 301, 347

Volcanoes, 722

World War II, 298, 309, 413-16

**Japan, Sea of, 717**

## Japanese (U. S.):

Births, 229  
Population: by state, 221  
See also Nonwhite races

Jarvis Island, 181

Java, 645-46

Area, 717

Volcanoes, 723

World War II, 414

Jefferson, Thomas:

Biography, 315-16

Cabinet, 335

Elections, 281

Family, 330

Hall of Fame, 514

Mt. Rushmore carving, 175

Jersey (isl.), 568

Jersey City, N. J.:

General information, 190

Government, 200

Population: growth, 216

Jerusalem, 746

Jesuits: Founded, 746

Jesus Christ:

Ascension, 497

Crucifixion, 745

Jet propulsion:

Airplane flights, 517

Ancient Greeks, 515

Jewelry:

Birthstones, 248

Carat: defined, 474

Consumer spending, 780

Sales, 790

Jewish months, 96-106

Jewish New Year, 497

Jews:

Deprived of German citizenship, 410

Holidays, 496-98

"Jewish race," 481

Nazi persecution, 410, 411

Number, 482, 486

Organizations, 496

Russian physicians arrested, 408

Joan of Arc, 746

John, Dr. Otto, 12

Johns Hopkins Hospital, 167

Johnson, Andrew:

Biography, 321

Cabinet, 335

Family, 330

Impeachment, 340

Johnson Debt Default Act, 296, 404

Johnston Island, 182

Johnstown, Pa., 216

Joint Chiefs of Staff, 334

Joliet, Ill., 216

Jordan (kingdom), 660-61

Currency: Far value, 805

Diplomats: U. S., 341

Jordan (river), 654

Journalism: Pulitzer Prizes, 505-07

See also Newspapers

Judah: Ancient kings, 109

Judges: International Court, 380

Judiciary Act, 298

Julian Calendar, 745

Juneau, Alaska, 179

Junior colleges, 253

Jupiter (god): Statue, 714

Jupiter (planet), 539, 544

Symbol, 542

Jury trial, 364

Justice, U. S. Dept. of, 331, 334

Attorneys General, 335-38

Justices:

Supreme Court, 339

Supreme Court: salaries, 329

Justinian Code, 746

Jutland, Battle of, 748

Juvenile delinquency, 242

## K

K2, 716

Kaesong, Korea, 420

Kalamazoo, Mich., 216

Kamchatka: Volcanoes, 722

Kanchenjunga, 716

Kansas:

General information, 165

Abbreviation, 212

Agriculture: statistics, 787

Altitudes, 209

Births: number, 229

Cities & towns, 223

Congress: members, 29, 31

Congress: representation, 292

Deaths: motor-vehicle, 235

Deaths: number, 229

Divorces: statistics, 238-39

Economy: statistics, 781

Education: statistics, 251, 252

Elections: statistics, 284-91

Executions: method, 242

Government, 201

Highest, lowest points, 209

Holidays, 499

Hospitals: number, 241

Map, 155

Marriages: statistics, 236

Motor vehicles: deaths, 235

Motor vehicles: laws, 244

Newspapers: number, 245

Places: by size, 223

Population: by sex, 222

Population: density, 218

Population: growth, 219-20

Population: marital status, 237

Population: racial, 221

Population: 21 yrs. & over, 222

Time zone, 151

Unemployment: compensation, 95

Voting: qualifications, 293

Kansas City, Kans., 165

Area & population, 216

Kansas City, Mo.:

Area, 216

Deaths: motor-vehicle, 234

Longitude & latitude, 537

Magnetic declination, 537

National Conventions, 280

Nelson Gallery, 278

Newspapers: leading, 246

Population, 216

Time of day, 537

Kansas-Nebraska Act, 350, 746

Kapp putsch, 410

Kashmir, 588-89

Map, 135

Kearney (destroyer), 405

Keating-Owen Act, 294

Kefauver Committee, 399

Kellogg-Briand Pact, 296, 404

Kellogg Foundation, 750

Kenosha, Wis., 216

Kentucky:

General information, 165-66

Abbreviation, 212

Agriculture: statistics, 787

Altitudes, 209

Births: number, 229

Cities & towns, 223

Congress: members, 29, 31

Congress: representation, 292

Deaths: motor-vehicle, 235

Deaths: number, 229

Divorces: statistics, 238-39

Economy: statistics, 781

Education: Negroes, 254

Education: statistics, 251, 252

Elections: statistics, 284-91

Executions: method, 242

Government, 201

Highest, lowest points, 209

Holidays, 499

Hospitals: number, 241

Map, 156

Marriages: statistics, 236

Motor vehicles: deaths, 235

Motor vehicles: laws, 244

Newspapers: number, 245

Places: by size, 223

Population: by sex, 222

Population: density, 218

Population: growth, 219-20

Population: marital status, 237

Population: racial, 221

Population: 21 yrs. & over, 222

Time zone, 151

Tornado (1925), 739

Unemployment: compensation, 95

Voting: qualifications, 293

Kentucky Derby, 884

Kenya, 569-70, 571

Area & population, 561

Kerensky, Alexander, 406

Kerr Bill, 300

Ketchikan, Alaska, 179

Key, Francis Scott, 372

Key West, Fla., 537

Kharkov, U.S.S.R., 415, 703

Kholak Pass, 548

Khyber Pass, 548

Kidnapings:

Greenlease boy, 399

Lindbergh baby, 398

Prisoners, 242

Kiev, U.S.S.R., 415, 703

Killarney, Lakes of, 652

Kilogram: Defined, 471

Kindergarten: Enrollments, 252

King James Version, 495

Kingman Reef, 182

Kings:

England, 119-20

France, 121

Israel & Judah, 109-10

Prussia, 122

Kings Canyon National Park, 272

Kingston, Ont., 537

Kitty Hawk, N. C., 515

Kiwanis International, 750

Klamath Falls, Oreg., 537

Knights of Columbus, 750

Knights of Labor, 774

Knights of Pythias, 750

Knot (meas.), 474

Know-Nothing party, 282

Knoxville, Tenn., 216, 537

Kodak: Invention, 479

Koje Island, 420

Korea:

General information, 661-

715

Aid: legislation, 300

Diplomats: U. S., 341

United Nations, 377

Korean War:

Business activity, 401

Casualties, 308

Chronology, 419-21

Combat pay, 307

Maps, 420

Krakatoa, 723



Kremlin (bldg.), 732  
Kurile Islands, 722  
Kuwait, 549  
Kwajalein, 415  
Kwantung, 605

## — L —

### Labor:

Antitrust laws, 294, 295, 296  
Children, 294, 298  
Closed shops: prohibited, 299  
Employment, 795, 798, 799  
Growth: U. S., 774-75  
Hours worked per week, 298, 757, 798, 799  
ILO, 379-80  
Injunctions: limited, 296  
Labor force: experienced, 232-33, 756  
Legislation, 294-301  
Lockouts: number, 800  
NLRB, 297, 333, 334  
Occupations, 799  
Organizations, 774-75  
Purchasing power, 782  
Railroads: hours, 294  
Strikes, 800  
Taft-Hartley Act, 299, 301  
Turnover, 801  
Unemployment, 798  
Unemployment: compensation, 95  
Unions: leading, 775  
Wages, 782, 795, 798, 799  
Wages: legislation, 296, 298, 300  
Wagner-Connery Act, 297  
Women, 801  
Workers: by age, 799  
Worktime needed to buy food, 782  
Worktime needed to buy radio set, 753  
Yellow-dog contracts: outlawed, 296  
Labor, U. S. Dept. of, 332, 334  
Secretaries, 337-38  
Labor Day, 497, 498, 499  
Labors of Hercules, 113-14  
Labrador, 713  
Laquer. *See* Paint  
Lacrosse, 837, 845, 902  
LaGuardia Field, 194  
Lake Charles, La., 166  
Lakes:  
Highest lake, 161  
Large lakes, 721  
Largest man-made lake, 165  
Lakewood, Ohio, 216  
Lamaism, 605  
Lamb: Prices, 785, 786  
Lamps: Invention, 479  
Lancaster, Pa., 216  
Land:  
Arable, 778  
Farm, 786  
"Land of 10,000 Lakes," 168  
Lander, Wyo., 537  
Landon, Alfred M., 280, 286  
Languages, 727  
Lansing, Mich., 216  
Laos, 631-32  
Area & population, 623  
Diplomats: U. S., 341  
Laramie, Wyo., 179  
Larceny: Arrests, 243  
Lard: Prices, 783  
Laredo, Tex., 216  
Lassen Volcanic National Park, 272

Last Chance Gulch, 169  
Las Vegas, Nev., 170, 213, 537  
Lateran Treaty, 708  
Latitudes: Cities, 536-37  
Latter-day Saints, 486, 746  
Latvia:  
General information, 662-63  
Diplomats: U. S., 341  
Emigration: to U. S., 226  
*See also* Union of S.S.R.  
Laundries:  
Earnings & hours worked, 799  
Number, 793  
Lawn bowling, 917  
Lawn tennis, 826-29  
Lawrence, Mass., 216  
Laws:  
Divorce: by state, 238-39  
Marriage: by state, 236  
Motor-vehicle: by state, 244  
Passed by Congress, 294-302  
School-attendance, 252  
Lawton, Okla., 173  
Lawyers: Number, 232  
Layoffs: Industrial, 801  
Lay Gallery, 277  
Lead:  
Production: U. S., 786  
Production: world, 777  
League (meas.), 474  
League of Nations:  
Chronology, 422  
Members, 377  
World Court, 295, 297  
Leaning Tower of Pisa, 732  
Leather industry:  
Hours worked, 798  
Prices, 790  
Production, 785  
Wages, 798  
Lebanon:  
General information, 663-64  
Currency: Par value, 805  
Diplomats: U. S., 341  
Trade: with U. S., 801  
United Nations, 377  
Lee, Robert E., 514, 744  
Leeward Islands, 582  
Area & population, 561  
Legislatures: Statistics, 201  
Leipzig, Germany, 637  
Battle of, 746  
Lend-Lease Act, 298  
Length: Measures, 470  
Lenin, Nikolai, 703  
Leningrad, U.S.S.R., 702, 729, 730  
World War II, 414, 415  
Lens: Bifocal: invention, 479  
Lent, 496  
Leopold III, 554  
Leopold-Loeb case, 746  
Lesbos, 639  
Lesser Antilles, 722  
Lesser Sunda Islands, 723  
Lethal gas:  
First state to use, 170  
States using, 242  
Letters:  
Greek, 96-106  
Hebrew, 96-106  
Lewis, John L., 402  
Lewis and Clark expedition, 196  
Lewiston, Idaho, 163, 537  
Lewiston, Maine, 166  
Lexington, Ky., 165, 216  
Lexington-Concord, Battle of, 744  
Leyte (carrier), 739  
Liabilities:  
Corporations, 784  
Federal Reserve System, 794  
Liberia:  
General information, 664-65  
Agriculture: rating, 778

Diplomats: U. S., 341  
Trade: with U. S., 801  
United Nations, 377  
Liberty, Statue of, 357  
Liberty Bell, 342  
Liberty party, 285  
Libraries:  
Books: postal rate, 312  
Colleges, 730  
First circulating library, 748  
Librarians: number, 232  
United States, 729-30  
World, 729-30  
Libya, 664  
Diplomats: U. S., 341  
Licenses: Automobile, 244  
Lick Observatory, 546  
Lidice, Czechoslovakia, 415  
Lile, Trygve, 422  
Liechtenstein, 665  
Diplomats: U. S., 341  
Life expectancy, 230, 231  
Life insurance. *See* Insurance  
Light:  
Electromagnetic theory, 480  
Velocity, 545  
Velocity: discovery, 480  
Light-year: Defined, 474  
Lighthouse: Oldest in U. S., 171  
"Lighthouse of Mediterranean," 722  
Lightning rod: Invention, 479  
Lights: Festival of, 498  
Lima, Declaration of, 404  
Lima, Ohio, 216  
Lincoln, Abraham:  
Biography, 320-21  
Birthday (holiday), 496, 499  
Burial Place, 164  
Cabinet, 336  
Elections, 282  
Emancipation Proclamation, 744  
Family, 330  
Gettysburg Address, 370  
Hall of Fame, 514  
Minority President, 370  
Mt. Rushmore carving, 175  
Nominations, 280  
Lincoln, Nebr., 216, 537  
Lindbergh, Charles A.:  
Atlantic flight, 746  
Kidnap case, 398  
Link (meas.): Defined, 474  
Linotype machine: Invention, 479  
Lions Clubs, 750  
Lipari Islands, 722  
Liquor:  
Consumer spending, 780  
Employees: state, 795  
Establishments, 789  
Laws: violators, 242, 243  
Legislation, 295, 296  
Prohibition, 295, 368  
Repeal, 369  
Sales, 790, 791  
States prohibiting, 168, 173  
Taxes: collections, 796  
3.2 wine & beer, 296  
Volstead Act, 295  
Lisbon, Portugal, 685  
Litter: Defined, 471  
Literacy tests:  
Immigrants, 294  
Voting applicants, 293  
Literature:  
Nobel Prizes, 500-01  
Pulitzer Prizes, 507-10  
Review of 1954, 16-18  
Lithography: Invention, 479  
Lithuania:  
General information, 665-66  
Diplomats: U. S., 341

Emigration: to U. S., 226  
 See also Union of S.S.R.  
 Little Big Horn, Battle of, 745  
 Little Colorado River, 211  
 Little Rock, Ark.:  
   Area, 216  
   Climate, 213  
   Newspaper: leading, 246  
   Population, 216  
 Litvinov, Maxim, 407  
 Livestock, 786  
 Loans:  
   Commercial rates, 794  
   Federal Reserve, 794  
   International Bank, 805  
   Veterans, 310  
 Locarno Conference, 746  
 Locarno Pact, 470  
 Lockouts: Number, 800  
 Locksmith shops: Number, 793  
 Loeb-Leopold case, 746  
 Logan, Utah, 176  
 Logan International Airport, 167  
 London, England:  
   Fire, 739  
   Longitude & latitude, 536  
   Museums, 730-31  
   Plague, 746  
   Population, 560  
   Time of day, 536  
 London, Ont., 537  
 London Economic Conference, 404  
 London Naval Pact, 404  
 London Protocol, 26  
 Long, Huey, 342, 398  
 Long Beach, Calif., 216, 246  
 Long Island: Map, 152-53  
 Long Island, Battle of, 744  
 Long Island Sound, 208  
 Longevity: Animals, 719  
 Longitudes: Cities, 536-37  
 Longs Peak, 716  
 Lookout Mountain, Battle of, 744  
 Lorain, Ohio, 216  
 Lords, House of. See Parliament  
 Los Alamos, N. Mex., 171  
 Los Angeles, Calif.:  
   General information, 190-91  
   Climate, 213  
   Deaths: motor-vehicle, 234  
   Government, 200  
   Longitude & latitude, 537  
   Magnetic declination, 537  
   Museums, 277, 278  
   Newspapers: leading, 246  
   Planetarium, 546  
   Population: growth, 216  
   Population: world rank, 737  
   Time of day, 537  
 Louis XVI: Beheaded, 746  
 Louis, Joe: Record, 842  
 Louisiana:  
   General information, 166  
   Abbreviation, 212  
   Agriculture: statistics, 787  
   Altitude, 209  
   Births: number, 229  
   Cities & towns, 223  
   Congress: members, 29, 31  
   Congress: representation, 292  
   Deaths: motor-vehicle, 235  
   Deaths: number, 229  
   Divorces: statistics, 238-39  
   Economy: statistics, 781  
   Education: Negroes, 254  
   Education: statistics, 251, 252  
   Elections: statistics, 284-91  
   Executions: method, 242  
   Government, 201  
   Highest, lowest points, 209  
   Holidays, 499  
   Hospitals: number, 241

Map, 154  
 Marriages: statistics, 236  
 Motor vehicles: deaths, 235  
 Motor vehicles: laws, 244  
 Newspapers: number, 245  
 Places: by size, 223  
 Population: by sex, 222  
 Population: density, 218  
 Population: growth, 219-20  
 Population: marital status, 237  
 Population: racial, 221  
 Population: 21 yrs. & over, 222  
 Shore line, 214  
 Time zone, 151  
 Unemployment: compensation, 95  
 Voting: qualifications, 293  
 Louisiana Purchase, 208  
 Louisville, Ky., 165  
   Area, 216  
   Climate, 213  
   Longitude & latitude, 537  
   Magnetic declination, 537  
   Newspaper: leading, 246  
   Population, 216  
   Time of day, 537  
 Louvre, 730  
 Lowell, Mass., 216  
 "Lowell of the South," 163  
 Lower California, 668  
 Loyalty Islands, 633  
 Lubbock, Tex., 216  
 Lumber industry:  
   Establishments, 789  
   Hours worked, 798  
   Prices, 790  
   Production, 785  
   Sales, 790, 791  
   Wages, 798  
 Luray Cavern, 724  
 Lusitania (ship), 743  
 Luther, Martin, 747  
 Lutheran Churches, 484  
 Luxemburg:  
   General information, 666  
   Birth rate, 233  
   Currency: Par value, 805  
   Death rate, 233  
   Diplomats: U. S., 341  
   ECA: allotments, 805  
   Emigration: to U. S., 226  
   Employment: rating, 779  
   Industry: production, 800  
   International Bank, 805  
   MSA: allotments, 805  
   Minerals: rating, 777  
   Trade, 801, 803  
   United Nations, 377  
   World War II, 413  
 Luzon: Area, 717  
 Lynn, Mass., 216  
 Lytton Commission, 422

## — M —

Macao, 688  
   Area & population, 687  
 MacArthur, Douglas, 414, 419-20  
 McCarran-Walter Immigration Bill, 301  
 McCarthy, Joseph R., 24-25, 399  
 McClellan, George B., 282  
 Machine gun: Invention, 479  
 Machinery industry:  
   Establishments, 789  
   Exports, 802  
   Hours worked, 798  
   Imports, 802  
   Machinists: number, 233  
   Prices, 790  
 Production, 785  
 Sales, 790  
 McKeesport, Pa., 216  
 McKinley, William:  
   Biography, 323  
   Cabinet, 337  
   Elections, 282, 291  
   Family, 330  
   Nominations, 280  
 McKinley, Mt., 716  
 Macon, Ga., 216  
 Madagascar, 628-29, 717  
   Area & population, 623  
 Madeira, 686  
 Madison, James:  
   Biography, 316  
   Cabinet, 335  
   Elections, 281  
   Family, 330  
   Hall of Fame, 514  
 Madison, Wis., 213, 216  
 Madrid, Spain, 693, 729, 730  
 Surrender, 412  
 Madura, 645-46  
 Magazines:  
   Advertising, 793  
   Leading magazines, 248  
 Magellan: Voyage, 714  
 Magna Carta, 746  
 Magnetic declinations, 537  
 Magnum: Defined, 474  
 Magsaysay, Ramon, 682  
 Mail: Regulations, 311-14  
 Mail-order houses:  
   Development: U. S., 766  
   Leading, 791  
   Sales, 791  
 "Main Stem," 194  
 Maine:  
   General information, 166  
   Abbreviation, 212  
   Agriculture: statistics, 787  
   Altitudes, 209  
   Births: number, 229  
   Cities & towns, 223  
   Congress: members, 29, 31  
   Congress: representation, 292  
   Deaths: motor-vehicle, 235  
   Deaths: number, 229  
   Divorces: statistics, 238-39  
   Economy: statistics, 781  
   Education: statistics, 251, 252  
   Elections: statistics, 284-91  
   Government, 201  
   Highest, lowest points, 209  
   Holidays, 499  
   Hospitals: number, 241  
   Map, 152  
   Marriages: statistics, 236  
   Motor vehicles: deaths, 235  
   Motor vehicles: laws, 244  
   Newspapers: number, 245  
   Places: by size, 223  
   Population: by sex, 222  
   Population: density, 218  
   Population: growth, 219-20  
   Population: marital status, 237  
   Population: racial, 221  
   Population: 21 yrs. & over, 222  
   Shore line, 214  
   Time zone, 151  
   Unemployment: compensation, 95  
   Voting: qualifications, 293  
 Maine (ship), 747  
 Maize. See Corn  
 Majorca, 694  
 Majority: Defined, 293  
 Malaria: Death rates, 228

**Malayan Federation:**

General information, 586-87

Agriculture: rating, 778

Area &amp; population, 561

Minerals: rating, 777

Trade, 803

World War II, 414

Malden, Mass., 216

Maldiv Islands, 666-67, 715

Malenkov, Georgi M., 408

Males. *See* Men

Malta, 568

Area &amp; population, 561

Mammoth Cave, 272, 724

Mammoth Hot Springs, 725

Man, Isle of, 567-68

Manchester, N. H., 216, 276, 537

Manchukuo, 602

Manchuria, 602

Japanese invasion, 422

Mandalay, Burma, 598

Manganese: Production, 777

Mangareva, 632-33

Manhattan:

Area &amp; population, 217

Borough president: name, 193

Island purchased, 746

*See also* New York, N. Y.

Manila, Philippines, 681

World War II, 414, 415

Manitoba, Lake, 721

Manitoba (province), 580

Mann-Elkins Act, 294

Manslaughter, 243

Manufacturing:

Airplanes, 520, 521

Development: U. S., 756-61

Employment, 781, 798

Establishments, 784

Exports, 802

Hours worked, 798

Imports, 802

Injuries, 800

Labor: turnover, 801

NAM, 776

Production: indexes, 785

Wages, 798

Workers: number, 798

Mao Tse-tung, 601

Maps:

Africa, 148

Asia, 142-43

Canal Zone, 150

Central America, 150

Europe, 140-41

Europe (1914, 1938, 1942), 407-9

Germany: since 1914, 407-09

Indo-China, 135

Iron Curtain countries, 138-39

Israel, 417

Kashmir dispute, 135

Korean War, 420

Middle East, 146

NATO countries, 138-39

North America, 149

Northern Hemisphere, 136-37

Oceania, 144-45

South America, 147

Time zones: U. S., 151

Trieste, 417

Trouble areas, 135, 146, 417

U. S.: geographical, 151

U. S.: states, 152-58

Marco Polo, 713

Marconi, Guglielmo, 479

Mardi Gras, 193, 496, 499

Margarine: Consumption, 783

Mariana Islands, 183

Marie Antoinette: Beheaded, 745

Marihuana, 242

Marine Corps (U. S.):

Allowances, 306

Casualties, 308

History, 305

Insignia, 306

Officers, 306, 334

Pay, 306, 307

Personnel: by year, 309

Ranks, 306, 307

Marine Historical Assn., 277

Maritime Commission, 257

Marne, Battle of, 748

Marquesas Islands, 632-33

Marriages:

Laws: by state, 236

Marriage prospects, 240

Married persons: number, 237

Number: by state, 236

Number: by year, 240

Remarriage after divorce, 239

Mars (planet), 538, 544

Symbol, 542

Marshall Islands, 183

World War II, 414, 415

Marshall Plan, 310, 406

Martinique, 630-31

Area &amp; population, 623

Mary, Queen of Scots, 746

Maryland:

General information, 166-67

Abbreviation, 212

Agriculture: statistics, 787

Altitudes, 209

Births: number, 229

Cities &amp; towns, 223

Congress: members, 29, 31

Congress: representation, 292

Constitution: ratified, 358

Deaths: motor-vehicle, 235

Deaths: number, 229

Divorces: statistics, 238-39

Economy: statistics, 781

Education: Negroes, 254

Education: statistics, 284-91

Executions: method, 242

Government, 201

Highest, lowest points, 209

Holidays, 499

Hospitals: number, 241

Map, 152

Marriages: statistics, 236

Motor vehicles: deaths, 235

Motor vehicles: laws, 244

Newspapers: number, 245

Places: by size, 223

Population: by sex, 222

Population: density, 218

Population: growth, 219-20

Population: marital status, 237

Population: racial, 221

Population: 21 yrs. &amp; over, 222

Shore line, 214

Time zone, 151

Unemployment: compensation, 95

Voting: qualifications, 293

Masaryk, Jan: Death, 418

Mason and Dixon's Line, 122

Masons (assn.), 749-50

Masqat. *See* Oman

Mass: units, 470

Mass of the Presanctified, 496

Massachusetts:

General information, 167

Abbreviation, 212

Agriculture: statistics, 787

Altitudes, 209

Births: number, 229

Cities &amp; towns, 223

Congress: members, 29, 31-32

Congress: representation, 292

Constitution: ratified, 358

Deaths: motor-vehicle, 235

Deaths: number, 229

Divorces: statistics, 238-39

Economy: statistics, 781

Education: statistics, 251, 252

Elections: statistics, 284-91

Executions: method, 242

Government, 201

Highest, lowest points, 209

Holidays, 499

Hospitals: number, 241

Map, 152

Marriages: statistics, 236

Motor vehicles: deaths, 235

Motor vehicles: laws, 244

Newspapers: number, 245

Places: by size, 223

Population: by sex, 222

Population: density, 218

Population: growth, 219-20

Population: marital status, 237

Population: racial, 221

Population: 21 yrs. &amp; over, 222

Shore line, 214

Time zone, 151

Unemployment: compensation, 95

Voting: qualifications, 293

Massachusetts Handicap, 884

Massive, Mt., 210

Match: Invention, 479

Maternity hospitals, 241

Mathematics:

Conversion factors, 475

Cubes &amp; cube roots, 475

Decimals &amp; fractions, 475

Formulas, 472

Interest: simple, 473

Mean &amp; median, 475

Measures, 470-75

Roman numerals, 473

Squares &amp; square roots, 475

Weights, 470-75

Matter: Conversion to energy, 472

Matterhorn, 716

Mauna Kea, 180

Mauna Loa, 716

Maundy Thursday, 498

Mauretania (ship), 743

Mauritania, 627

Area &amp; population, 623

Mauritius, 571

Area &amp; population, 561

Mausoleum at Halicarnassus, 714

Maximilian: Executed, 746

Mayflower (ship), 371

Mayflower Compact, 371

Mayors:

Names, 183-99

Terms &amp; salaries, 200

Mc. *See* Mac

Mean (math.): Defined, 475

Mean-solar time, 522, 545

Measurement ton, 474

Measures:

Defined, 470-75

Sports, 864

Meat:

Consumption, 783

Exports &amp; imports, 802

Income: marketing, 788

Prices: farm, 786

Prices: retail, 783

Production: world, 778

Rationing, 402

Wholesale: establishments, 789



- Mechanics:** Number, 233  
 Medford, Mass., 216  
 Medford, Oreg., 174  
 Median: Defined, 475  
 Medical care: Consumer spending, 780, 783  
**Medicine:**  
   Discoveries, 480  
   Hospitals, 241  
   Nobel Prizes, 13, 501-04  
 Mediterranean Sea, 717  
 Meetings: How to conduct, 125-32  
**Mein Kampf**, 410  
 Mekong, 720  
 Melbourne, Australia, 591  
 Melting points: Chemical elements, 477-78  
 Melville (Is.): Area, 717  
 Memorial Day, 497, 499  
 Memorial Park, National, 273  
 Memorials, National, 273  
**Memphis, Tenn.:**  
   General information, 191  
   Deaths: motor-vehicle, 234  
   Government, 200  
   Longitude & latitude, 537  
   Magnetic declination, 537  
   Newspaper: leading, 246  
   Population: growth, 216  
   Time of day, 537  
**Men:**  
   Births: males, 224  
   College graduates, 254  
   Death rate: by age & year, 232  
   Deaths: by year, 224  
   Life expectancy, 230, 231  
   Marital status, 237  
   Marriage prospects, 240  
   Number: by age & race, 224  
   Number: by state, 222  
   Workers, 799  
**Mendel laws:** Discovery, 480  
 Mendes-France, Pierre, 621-22  
 Mennonites, 486  
 Mental deficiencies: Education, 254  
 Mental diseases, 241  
 Merchandise Mart, 186  
 Merchant fleets, 779  
 Merchant Marine Academy, U. S., 304  
**Mercury (planet)**, 538, 544  
   Symbol, 542  
 Mercury-vapor lamp, 479  
 Meridian, Miss., 168  
 Merrimac (ship), 746  
 Mesa, Ariz., 159  
 Mesa Verde National Park, 272  
 Mesabi Range, 168  
 Mesopotamia, 649  
 Messina, Strait of, 656  
**Metals industry:**  
   Countries: leading, 776-77  
   Establishments, 789  
   Exports, 802  
   Hours worked, 798, 799  
   Imports, 802  
   Prices, 790  
   Production, 785, 786  
   Sales, 790  
   Wages, 798, 799  
**Meteorology:** WMO, 380  
   See also Climate  
**Meteors**, 546  
**Meter (meas.):** Defined, 470  
**Methodism:**  
   Churches, 484  
   Founded, 495  
**Methodist Church, The**, 484  
   Bishops, 488  
**Metric system**, 470-72  
**Metropolitan Life Bldg.**, 742  
**Metropolitan Museum**, 274  
**Meuse-Argonne, Battle of**, 748  
**Mexican Cession**, 208  
**Mexican War**, 308, 746  
**Mexico:**  
   General information, 667-68  
   Agriculture: rating, 778  
   Airlines: rating, 779  
   Birth rate, 233, 779  
   Conquest, 713  
   Currency: par value, 805  
   Death rate, 233  
   Diplomats: U. S., 341  
   Emigration: to U. S., 226  
   Holiday: national, 736  
   Industry: rating, 779  
   International Bank, 805  
   Life expectancy, 231  
   Minerals: rating, 776, 777  
   Oil & land seizures, 404  
   Time of day, 522  
   Trade, 801, 803  
   United Nations, 377  
   U. S. intervention, 329  
   Volcanoes, 723  
**Mexico, Gulf of:**  
   Coast line: U. S., 214  
   Dimensions, 717  
   U. S.: water area, 208  
**Mexico City, Mexico**, 667  
**Miami, Fla.:**  
   General information, 191-92  
   Climate, 213  
   Government, 200  
   Longitude & latitude, 537  
   Magnetic declination, 537  
   Newspapers: leading, 246  
   Population: growth, 216  
   Time of day, 537  
**Michael (Rumania):** Abdicates, 418  
**Michigan:**  
   General information, 167-68  
   Abbreviation, 212  
   Agriculture: statistics, 787  
   Altitudes, 209  
   Births: number, 229  
   Cities & towns, 223  
   Congress: members, 29, 32  
   Congress: representation, 282  
   Deaths: motor-vehicle, 235  
   Deaths: number, 229  
   Divorces: statistics, 238-39  
   Economy: statistics, 781  
   Education: statistics, 251, 252  
   Elections: statistics, 284-91  
   Government, 201  
   Highest, lowest points, 209  
   Holidays, 499  
   Hospitals: number, 241  
   Map, 156  
   Marriages: statistics, 236  
   Motor vehicles: deaths, 235  
   Motor vehicles: laws, 244  
   Newspapers: number, 245  
   Places: by size, 223  
   Population: by sex, 222  
   Population: density, 218  
   Population: growth, 219-20  
   Population: marital status, 237  
   Population: racial, 221  
   Population: 21 yrs. & over, 222  
   Time zone, 151  
   Tornado (1953), 739  
   Unemployment: compensation, 95  
   Voting: qualifications, 293  
**Michigan, Lake**, 721  
   First navigated, 713  
   U. S.: water area, 208  
**Mieron:** Defined, 474  
**Microscope:** Invention, 479  
**Middle Atlantic States:**  
   Economy: statistics, 781  
   Population: 21 yrs. & over, 222  
**Middle Congo**, 627  
   Area & population, 623  
**Middle East:** Map, 146  
**Midway**, 182  
   World War II, 415  
**Mikhailovic, Gen. Draja**, 414  
**Mil (meas.):** Defined, 474  
**Milan, Italy**, 654  
**Mile runs:** Fastest, 867, 871  
**Mileages between cities**, 202-07  
**Military Academy (U. S.)**, 303  
   Government funds, 257  
   90 cadets dismissed, 399  
**Military assistance.** See Foreign aid  
**Military forces.** See Armed forces  
**Military Parks, National**, 273  
**Milk industry:**  
   Consumption, 783  
   Prices, 783, 786  
   Production: world, 778  
**Milky Way**, 542  
**Millimicron:** Defined, 474  
**Milwaukee, Wis.:**  
   General information, 192  
   Deaths: motor-vehicle, 234  
   Government, 200  
   Layton Gallery, 277  
   Longitude & latitude, 537  
   Magnetic declination, 537  
   Newspaper: leading, 246  
   Population: growth, 216  
   Time of day, 537  
**Mindanao:** Area, 717  
**Mindszenty, Cardinal**, 418  
**Minerals.** See Coal; Metals  
**Ming Dynasty**, 746  
**Mining:**  
   Employment, 798  
   Establishments, 784  
   Hours worked, 799  
   Injuries, 800  
   Wages, 799  
**Minneapolis, Minn.:**  
   General information, 192  
   Climate, 213  
   Deaths: motor-vehicle, 234  
   Government, 200  
   Longitude & latitude, 537  
   Magnetic declination, 537  
   National Convention, 280  
   Newspapers: leading, 247  
   Population: growth, 215  
   Time of day, 537  
**Minnesota:**  
   General information, 168  
   Abbreviation, 212  
   Agriculture: statistics, 787  
   Altitudes, 209  
   Births: number, 229  
   Cities & towns, 223  
   Congress: members, 29, 32  
   Congress: representation, 292  
   Deaths: motor-vehicle, 235  
   Deaths: number, 229  
   Divorces: statistics, 238-39  
   Economy: statistics, 781  
   Education: statistics, 251, 252  
   Elections: statistics, 284-91  
   Government, 201  
   Highest, lowest points, 209  
   Holidays, 499  
   Hospitals: number, 241  
   Map, 155  
   Marriages: statistics, 236

**Minnesota — (cont.)**

Motor vehicles: deaths, 235  
 Motor vehicles: laws, 244  
 Newspapers: number, 245  
 Places: by size, 223  
 Population: by sex, 222  
 Population: density, 218  
 Population: growth, 219-20  
 Population: marital status, 237  
 Population: racial, 221  
 Population: 21 yrs. & over, 222  
 Time zone, 151  
 Unemployment: compensation, 95  
 Voting: qualifications, 293

**Mississippi River, 211****Minority Presidents, 370****Minot, N. Dak., 172****Mint: First, 195****Mint Museum of Art, 277****Miquelon. See St. Pierre****Mississippi:****General information, 168****Abbreviation, 212****Agriculture: statistics, 787****Altitudes, 209****Births: number, 229****Cities & towns, 223****Congress: members, 29, 32****Congress: representation, 292****Deaths: motor-vehicle, 235****Deaths: number, 229****Divorces: statistics, 238-39****Economy: statistics, 781****Education: Negroes, 254****Education: statistics, 251, 252****Elections: statistics, 284-91****Executions: method, 242****Government, 201****Highest, lowest points, 209****Holidays, 499****Hospitals: number, 241****Map, 154****Marriages: statistics, 236****Motor vehicles: deaths, 235****Motor vehicles: laws, 244****Newspapers: number, 245****Places: by size, 223****Population: by sex, 222****Population: density, 218****Population: growth, 219-20****Population: marital status, 237****Population: racial, 221****Population: 21 yrs. & over, 222****Shore line, 214****Time zone, 151****Tornadoes (1936), 739****Unemployment: compensation, 95****Voting: qualifications, 293****Mississippi River, 211, 720****Discovery, 713****Floods, 738****Missoula, Mont., 169****Missouri:****General information, 169****Abbreviation, 212****Agriculture: statistics, 787****Altitudes, 209****Births: number, 229****Cities & towns, 223****Congress: members, 29, 32****Congress: representation, 292****Deaths: motor-vehicle, 235****Deaths: number, 229****Divorces: statistics, 238-39****Economy: statistics, 781****Education: statistics, 251, 252****Elections: statistics, 284-91****Executions: method, 242****Government, 201****Highest, lowest points, 209****Holidays, 499****Hospitals: number, 241****Map, 157****Marriages: statistics, 236****Motor vehicles: deaths, 235****Motor vehicles: laws, 244****Newspapers: number, 245****Places: by size, 223****Population: by sex, 222****Population: density, 218****Population: growth, 219-20****Population: marital status, 237****Population: racial, 221****Population: 21 yrs. & over, 222****Time zone, 151****Unemployment: compensation, 95****Voting: qualifications, 293****Monte Carlo, Monaco, 669****Montenegro, 711****Montevideo, Uruguay, 707****Montgomery, Ala.:****Area, 216****Climate, 213****Confederate capital, 159****Longitude & latitude, 537****Magnetic declination, 537****Population, 216****Time of day, 537****Montgomery Ward & Co., 402****Months:****Jewish, 96-106****Sidereal & synodic, 545****Monticello, 177****Montpelier, Vt., 177, 537****Montreal, Que., 537, 577****Monuments, National, 272-73****Moon, 544-45****Eclipse, 545****Hit by radar, 398****Phases (1955), 524-35****Rise & set (1955), 524-35****Symbol, 542****Mooney, Tom: Sentenced, 746****Moose Jaw, Sask., 537****Morehead Planetarium, 546****Mormons, 177, 486, 746****Mormon Tabernacle, 198****Morning stars (1955), 538-41****Morocco:****General information, 670-71, 694****Area & population, 623, 694****Diplomats: U. S., 341****Minerals: rating, 777****Morrison Planetarium, 546****Moscow, U.S.S.R.:****Conferences, 405, 415****Fire (1812), 739****Kremlin, 732****Library, 729****Longitude & latitude, 536****Population, 737****Time of day, 536****World War II, 414****Moses: Leads Jews from Egypt, 745****Moslems. See Mohammedanism****Mosques: Famous, 733****Mossadeh, Mohammed, 648****"Mother of Presidents," 177****Mother's Day, 499****Motion pictures:****Academy Awards, 510-12****Invention, 479****N. Y. Critics' awards, 512-13****Review of 1954, 21-22****Sound pictures: first, 479****Theaters: number, 793****Top-grossing films, 750****Motor, A-C: Invention, 479****Motor vehicles:****Death rate: by year, 228****Deaths: by city, 234****Education: Negroes, 254****Education: statistics, 251, 252****Elections: statistics, 284-91****Executions: method, 242****Government, 201****Highest, lowest points, 209****Holidays, 499****Hospitals: number, 241****Map, 157****Marriages: statistics, 236****Motor vehicles: deaths, 235****Motor vehicles: laws, 244****Newspapers: number, 245****Places: by size, 223****Population: by sex, 222****Population: density, 218****Population: growth, 219-20****Population: marital status, 237****Population: racial, 221****Population: 21 yrs. & over, 222****Time zone, 151****Unemployment: compensation, 95****Voting: qualifications, 293**

Deaths: by state, 235  
 Deaths: by year & type, 235  
 Development: U. S., 764-65  
 Domestic traffic, 792  
 Exports, 802  
 Laws: arrests, 243  
 Laws: by state, 244  
 Production: world, 779  
 Sales, 790, 791  
*See also* Automobiles  
 Motorboating, 877-78, 907  
 Mottoes: State, 159-79  
 Mound State Monument, 277  
 Moundville, Ala., 277  
 Mt. *See* name of peak  
 Mt. Hamilton, Calif., 546  
 Mt. McKinley National Park, 272  
 Mt. Rainier National Park, 272  
 Mt. Vernon, N. Y., 216  
 Mt. Vernon (Va.), 177  
 Mt. Wilson Observatory, 546  
 Mountain states:  
   Economy: statistics, 781  
   Population: 21 yrs. & over, 222  
 Mountains:  
   Heights: U. S., 210, 716  
   Heights: world, 716  
   Highest mountain east of Rockies, 175  
   Highest mountain in eastern U. S., 172  
   *See also* Volcanoes  
 Mozambique, 687-88  
 Mukden, Manchuria, 601  
 Mules: On farms, 787  
 Muncie, Ind., 216  
 Munich, Germany:  
   Beer-hall putsch, 410  
   Longitude & latitude, 536  
   Parley (1938), 411  
   Population, 634  
   State Library, 729  
   Time of day, 536  
 Murders: Number, 243  
 Murray, Utah, 176  
 Muscatine, Iowa, 165  
 Muscle Shoals, 159, 295  
 Muses (myth.), 115  
 Museums:  
   First science museum, 749  
   United States, 274-78  
   World, 730-31  
 Music:  
   Musicians: number, 232  
   N. Y. Critics' awards, 513-14  
   Opera composers, 123-24  
   Pulitzer Prizes, 510  
 Muskogee, Okla., 173  
 Mussolini, Benito, 654-55  
   Deposed, 415  
   Killed, 416  
 Mutual Broadcasting System, 248  
 Mutual Security Agency: Allotments, 805  
 Mutual Security Appropriation Bill, 301, 302  
 Mystic, Conn., 277  
 Mythology:  
   Egyptian, 119  
   Greek & Roman, 111-17  
   Norse, 117-19

## N

Library, 729  
 Longitude & latitude, 536  
 Museum, 730  
 Population, 654  
 Time of day, 536  
 Napoleon: Exiles, 746  
 Napoleonic Code, 744  
 Napoleonic Wars, 746  
 Narcotic laws:  
   Arrests, 243  
   Prisoners, Federal, 242  
 Nashua, N. H., 170  
 Nashville, Tenn.:  
   Area, 216  
   Climate, 213  
   Longitude & latitude, 537  
   Magnetic declination, 537  
   Newspaper: leading, 247  
   Population, 216  
   Time of day, 537  
 Nassau, Bahamas, 576  
 Natal, 574  
 National Academy of Design, 274  
 National Air Museum, 275  
 National Anthem, 372  
 National Association of Manufacturers, 776  
 National Battlefield Parks, 273  
 National Battlefield Sites, 273  
 National Broadcasting Co., 248  
 National Capital Parks, 273  
 National Cemeteries, 273  
 National Collection of Fine Arts, 275  
 National Committees, 330  
 National Conventions, 279, 280  
 National Democratic party, 282  
 National Farmers Union, 776  
 National Gallery of Art, 275, 730  
 National Geographic Society, 750  
 National Grange, 776  
 National Historic Sites, 273  
 National Historical Parks, 272  
 National Housing Act, 297, 298  
 National Income, 759, 782  
 National Industrial Recovery Act, 296  
 National Labor Relations Act, 297  
 National Labor Relations Board, 297, 333, 334  
 National League. *See* Baseball; Football  
 National Memorial Park, 273  
 National Memorials, 273  
 National Military Parks, 273  
 National Monuments, 272-73  
 National Park System, 271-73  
 National Parkways, 273  
 National Recovery Administration, 296  
 National Republican party, 281  
 National Security Act of 1947, 299  
 National Security Council, 331, 333  
 National Zoological Park, 731  
 Nations. *See* Countries  
 Natural gas. *See* Gas  
 Natural history: Museums, 274-78  
 Natural resources: U. S., 761-62  
 Natural resources: World, 776-80  
 Naturalization, 225  
 Nauru, 594  
   Area & population, 561  
   Nautical mile: defined, 474  
   Navajo museum, 277  
   Naval Academy, U. S., 303-04  
   Government funds, 257  
 Naval ratios, 404  
 Navies: Leading countries, 780  
 Navigation:  
   Knot: defined, 474  
   Nautical mile: defined, 474

Steamships: records, 743  
 Navy (U. S.):  
   Allowances, 306  
   Casualties, 308  
   Court-martial: cases, 242  
   Court-martial: Expenditure, 797  
   First Admiral, 748  
   History, 304  
   Insignia, 306  
   Legislation, 301  
   Naval Academy, 303-04  
   Naval Air Station, 175  
   Naval War College, 175  
   Officers, 306, 334  
   Pay, 306, 307  
   Personnel: by year, 309  
   Ranks, 306, 307  
   Strength, 308  
 Navy, U. S. Dept. of:  
   Expenditure, 797  
   Secretaries, 335-38  
 Nazarene, Church of The, 485  
 Nazism, 410-11  
 Neap Tides, 545  
 Nebraska:  
   General information, 169-70  
   Abbreviation, 212  
   Agriculture: statistics, 787  
   Altitudes, 209  
   Births: number, 229  
   Cities & towns, 223  
   Congress: members, 29, 32  
   Congress: representation, 292  
   Deaths: motor-vehicle, 235  
   Deaths: number, 229  
   Divorces: statistics, 238-39  
   Economy: statistics, 781  
   Education: statistics, 251, 252  
   Elections: statistics, 284-91  
   Executions: method, 242  
   Government, 201  
   Highest, lowest points, 209  
   Holidays, 499  
   Hospitals: number, 241  
   Map, 155  
   Marriages: statistics, 236  
   Motor vehicles: deaths, 235  
   Motor vehicles: laws, 244  
   Newspapers: number, 245  
   Places: by size, 223  
   Population: by sex, 222  
   Population: density, 218  
   Population: growth, 219-20  
   Population: marital status, 237  
   Population: racial, 221  
   Population: 21 yrs. & over, 222  
   Time zone, 151  
   Unemployment: compensation, 95  
   Voting: qualification, 293  
 Needles, Calif., 537  
 Negbe, 653, 654  
 Negroes:  
   Births, 229  
   Detroit riots, 398  
   Dred Scott case, 745  
   Education, 254  
   Haiti, 641  
   Population: by state, 221  
   School segregation banned, 10  
   Segregation, 399  
   Voting rights, 368  
   *See also* Nonwhite races  
 Negroids, 481  
 Nehru, Pandit Jawaharlal, 588  
 Neil Award, 841  
 Nejd, 692  
 Nelson, Brit. Columbia, 537



**Nelson Gallery, 278****Nepal, 671-72**

Diplomats: U. S., 341

**Nephritis: Death rates, 228****Neptune (planet), 541, 544**

Symbol, 542

**Nervous diseases: Hospitals, 241****Netherlands:**

General information, 672-75

Agriculture: rating, 777, 778

Airlines: rating, 779

Birth rate, 233

Currency: par value, 805

Death rate, 233, 780

Diplomats: U. S., 341

ECA: allotments, 805

Emigration: to U. S., 226

Floods, 738

Industry: production, 800

Industry: rating, 779

International Bank, 805

Life expectancy, 231

MSA: allotments, 815

Merchant fleet: rating, 779

Trade, 779, 801, 803

United Nations, 377

World War II, 309, 413, 415

**Netherlands Indies. See Indonesia****Networks: Radio, 248****Neutrality:**

Acts, 294, 297, 298, 404

U. S. proclaims (1939), 413

**Neutron: Discovery, 480****Nevada:**

General information, 170

Abbreviation, 212

Agriculture: statistics, 787

Altitudes, 209

Births: number, 229

Cities &amp; towns, 223

Congress: members, 29, 32

Congress: representation, 292

Deaths: motor-vehicle, 235

Deaths: number, 229

Divorces: statistics, 238-39

Economy: statistics, 781

Education: statistics, 251, 252

Elections: statistics, 284-91

Executions: method, 242

Government, 201

Highest, lowest points, 209

Holidays, 499

Hospitals: number, 241

Map, 158

Marriages: statistics, 236

Motor vehicles: deaths, 235

Motor vehicles: laws, 244

Newspapers: number, 245

Places: by size, 223

Population: by sex, 222

Population: density, 218

Population: growth, 219-20

Population: marital status, 237

Population: racial, 221

Population: 21 yrs. &amp; over, 222

Time zone, 151

Unemployment: compensation, 95

Voting: qualifications, 293

**Nevada Falls, 718****Nevis, 582****New Bedford, Mass.:**

General information, 193

Government, 200

Population: growth, 217

**New Britain, Conn., 217****New Britain (Isl.), 722****New Brunswick, 580****New Caledonia, 633**

Area &amp; population, 623

Minerals: rating, 776

**New Castle, Del., 161****New Economic Policy (U.S.S.R.), 406****New England States:**

Economy: statistics, 781

Hurricanes, 739

Population: 21 yrs. &amp; over, 222

**New Guinea, British. See Papua****New Guinea (Isl.):**

Area, 717

Discovery, 714

World War II, 414

**New Guinea, Netherlands, 674-75****New Guinea, Territory of, 593**

Area &amp; population, 561

**New Hampshire:**

General information, 170

Abbreviation, 212

Agriculture: statistics, 787

Altitudes, 209

Births: number, 229

Cities &amp; towns, 223

Coastline, 214

Congress: members, 29, 32

Congress: representation, 292

Constitution: ratified, 358

Deaths: motor-vehicle, 235

Deaths: number, 229

Divorces: statistics, 238-39

Economy: statistics, 781

Education: statistics, 251, 252

Elections: statistics, 284-91

Executions: method, 242

Government, 201

Highest, lowest points, 209

Holidays, 499

Hospitals: number, 241

Map, 152

Marriages: statistics, 236

Motor vehicles: deaths, 235

Motor vehicles: laws, 244

Newspapers: number, 245

Places: by size, 223

Population: by sex, 222

Population: density, 218

Population: growth, 219-20

Population: marital status, 237

Population: racial, 221

Population: 21 yrs. &amp; over, 222

Shore line, 214

Time zone, 151

Unemployment: compensation, 95

Voting: qualifications, 293

**New Haven, Conn., 217, 537****New Hebrides, 633**

Area &amp; population, 561, 623

Volcanoes, 722

**New Ireland, 593****New Jersey:**

General information, 170-71

Abbreviation, 212

Agriculture: statistics, 787

Altitudes, 209

Births: number, 229

Cities &amp; towns, 223

Coastline, 214

Congress: members, 29, 31

Congress: representation, 292

Constitution: ratified, 358

Deaths: motor-vehicle, 235

Deaths: number, 229

Divorces: statistics, 238-39

Economy: statistics, 251, 252

Elections: statistics, 284-91

Executions: method, 242

Government, 201

Highest, lowest points, 209

Holidays, 499

Hospitals: number, 241

Map, 152

Marriages: statistics, 236

Motor vehicles: deaths, 235

Motor vehicles: laws, 244

Newspapers: number, 245

Places: by size, 223

Population: by sex, 222

Population: density, 218

Population: growth, 219-20

Population: marital status, 237

Population: racial, 221

Population: 21 yrs. &amp; over, 222

Shore line, 214

Time zone, 151

Unemployment: compensation, 95

Voting: qualifications, 293

**New London, Conn., 304****New London, Tex., 739****New Mexico:**

General information, 171

Agriculture: statistics, 787

Altitudes, 209

Births: number, 229

Cities &amp; towns, 223

Congress: members, 29, 32

Congress: representation, 292

Deaths: motor-vehicle, 235

Deaths: number, 229

Divorces: statistics, 238-39

Economy: statistics, 781

Education: statistics, 251, 252

Elections: statistics, 284-91

Execution: method, 242

Government, 201

Holidays, 499

Hospitals: number, 241

Map, 158

Marriages: statistics, 236

Motor vehicles: laws, 244

Newspapers: number, 245

Population: by sex, 222

Population: density, 218

Population: growth, 219-20

Population: marital status, 237

Population: racial, 221

Population: 21 yrs. &amp; over, 222

Time zone, 151

Unemployment: compensation, 95

Voting: qualifications, 293

**New Orleans, La.:**

General information, 193

Battle of, 748

Climate, 213

Deaths: motor-vehicle, 234

Government, 200

Longitude &amp; latitude, 537

Magnetic declination, 537

Newspapers: leading, 247

Population: growth, 217

Time of day, 537

**New Rochelle, N. Y., 217****New Year, Jewish, 497****New Year's Day, 496, 499****New York (state):**

General information, 171-72

Abbreviation, 212

Agriculture: statistics, 787

Altitudes, 209

Births: number, 229

Cities &amp; towns, 223

Congress: members, 29, 32

- Congress: representation, 292  
 Constitution: ratified, 358  
 Deaths: motor-vehicle, 235  
 Deaths: number, 229  
 Divorces: statistics, 238-39  
 Economy: statistics, 781  
 Education: statistics, 251, 252  
 Elections: statistics, 284-91  
 Executions: method, 242  
 Government, 201  
 Highest, lowest points, 209  
 Historical Association, 278  
 Holidays, 499  
 Hospitals: number, 241  
 Map, 152  
 Marriages: statistics, 236  
 Motor vehicles: deaths, 235  
 Motor vehicles: laws, 244  
 Newspapers: number, 245  
 Places: by size, 223  
 Population: by sex, 222  
 Population: density, 218  
 Population: growth, 219-20  
 Population: marital status, 237  
 Population: racial, 221  
 Population: 21 yrs. & over, 222  
 Shore line, 214  
 Time zone, 151  
 Unemployment: compensation, 95  
 Voting: qualifications, 293
- New York, N. Y.:**  
 General information, 193-94  
 Bridges, 735  
 Buildings: tallest, 742  
 Climate, 213  
 Critics' awards, 512-14  
 Deaths: motor-vehicle, 234  
 Fire (1835), 739  
 Government, 200  
 Harbor, 208  
 Loan rates: commercial, 794  
 Library, 730  
 Longitude & latitude, 537  
 Magnetic declination, 537  
 Market rate: open, 794  
 Museums, 274  
 National Conventions, 280  
 Newspapers: leading, 247  
 Planetarium, 546  
 Population: growth, 217  
 Population: world rank, 737  
 Snowfall, 726  
 Statue of Liberty, 357  
 Time of day, 537  
 Tweed Ring, 748  
 World's Fair, 398
- New Zealand:**  
 General information, 594-96  
 Agriculture: rating, 777, 778  
 Birth rate, 233  
 Death rate, 233  
 Diplomats: U. S., 341  
 Emigration: to U. S., 226  
 Employment: rating, 779  
 Geysers, 724  
 Life expectancy, 231  
 Museums, 731  
 Telephones: rating, 779  
 Trade, 801, 803  
 Treaty: U. S., Australia, 346-47  
 United Nations, 377  
 Volcanoes, 723  
 World War II, 309
- Newark, Del., 161**  
**Newark, N. J.:**  
 General information, 194  
 Deaths: motor-vehicle, 234  
 Government, 200
- Museum, 278**  
 Newspapers: leading, 247  
 Population: growth, 217  
**Newfoundland, 580, 717**  
**Newport, R. I., 175**  
**Newport News, Va., 177**  
**Newspapers:**  
 Advertising, 793  
 First tabloid, 749  
 Firsts, 748  
 Leading: U. S., 246-47  
 Number: by state, 245  
 Oldest newspaper: U. S., 189  
**Newsreel: First, 748**  
**Newton, Mass., 217**  
**Niacin: In food, 476**  
**Niagara Falls, 718**  
**Niagara Falls (town), N. Y., 217**  
**Nicaea, Council of, 745**  
**Nicaragua:**  
 General information, 675-76  
 Birth rate, 233  
 Currency: par value, 805  
 Death rate, 233  
 Diplomats: U. S., 341  
 Holiday: national, 736  
 International Bank, 805  
 Trade: with U. S., 801  
 United Nations, 377  
 U. S. intervention, 329  
 Volcanoes, 723  
**Nicholas II (Russia), 406**  
**Nicknames:**  
 Baseball clubs, 819  
 States, 159-79  
**Nicobar, See Andaman**  
**Niemoller, Rev. Martin, 411**  
**Niger, 720**  
 Area & population, 623  
**Nigeria, 571-72**  
 Area & population, 561  
 Minerals: rating, 777  
 Night schools, 252  
 Nile, 720  
**Nineteenth Amendment, 368**  
**Nirvana: Defined, 485**  
**Nixon, Richard M., 290**  
**Nobel Prizes, 500-04**  
 For 1954, 13  
**Nogales, Ariz., 537**  
**Nome, Alaska, 537**  
**Nominations: Presidential, 280**  
**Nonwhite races (U. S.):**  
 Life expectancy, 230  
 Population, 224  
*See also Negroes*  
**Norfolk, Va., 177**  
 Area, 217  
 Newspaper: leading, 247  
 Population, 217  
**Norfolk Dam, 734**  
**Norfolk Island, 594**  
 Area & population, 561  
 Normal schools, 253  
 Normandie (ship), 743  
**Norns (myth.), 118**  
**Norris Dam, 734**  
**Norris-LaGuardia Act, 296**  
**Norris-Morin Resolution, 295**  
**Norse mythology, 117-19**  
**North America:**  
 Area, 715  
 Dimensions, 715  
 Elevations, 715  
 Exploration, 713  
 Geographic center, 173  
 Map, 149  
 Population, 715  
 Religions, 482  
**North Atlantic Treaty Organization:**  
 Countries: map, 138-39  
 Economic strength, 418
- European army approved, 419**  
**Greece, Turkey admitted, 419**  
**Member nations, 428**  
**Ratification: U. S., 418**  
**Signed, 418**  
**Treaty, 299, 345-46**  
**North Borneo. See Borneo**  
**North Canadian River, 211**  
**North Carolina:**  
 General information, 172  
 Abbreviation, 212  
 Agriculture: statistics, 787  
 Altitudes, 209  
 Births: number, 229  
 Cities & towns, 223  
 Coastline, 214  
 Congress: members, 29, 32  
 Congress: representation, 292  
 Constitution: ratified, 358  
 Deaths: motor-vehicle, 235  
 Deaths: number, 229  
 Divorces: statistics, 238-39  
 Economy: statistics, 781  
 Education: Negroes, 254  
 Education: statistics, 251, 252  
 Elections: statistics, 284-91  
 Executions: method, 242  
 Government, 201  
 Highest, lowest points, 209  
 Holidays, 499  
 Hospitals: number, 241  
 Map, 153  
 Marriages: statistics, 236  
 Motor vehicles: deaths, 235  
 Motor vehicles: laws, 244  
 Newspapers: number, 245  
 Places: by size, 223  
 Population: by sex, 222  
 Population: density, 218  
 Population: growth, 219-20  
 Population: marital status, 237  
 Population: racial, 221  
 Population: 21 yrs. & over, 222  
 Shore line, 214  
 Time zone, 151  
 Unemployment: compensation, 95  
 Voting: qualifications, 293
- North Dakota:**  
 General information, 172-73  
 Abbreviation, 212  
 Agriculture: statistics, 787  
 Altitudes, 209  
 Births: number, 229  
 Cities & towns, 223  
 Congress: members, 29, 32  
 Congress: representation, 292  
 Deaths: motor-vehicle, 235  
 Deaths: number, 229  
 Divorces: statistics, 238-39  
 Economy: statistics, 781  
 Education: statistics, 251-52  
 Elections: statistics, 284-91  
 Government, 201  
 Highest, lowest points, 209  
 Holidays, 499  
 Hospitals: number, 241  
 Map, 155  
 Marriages: statistics, 236  
 Motor vehicles: deaths, 235  
 Motor vehicles: laws, 244  
 Newspapers: number, 245  
 Places: by size, 223  
 Population: by sex, 222  
 Population: density, 218  
 Population: growth, 219-20

**North Dakota—(cont.)**

Population: marital status, 237  
 Population: racial, 221  
 Population: 21 yrs. & over, 222  
 Time zone, 151  
 Unemployment: compensation, 95  
 Voting: qualifications, 293

North Las Vegas, Nev., 170  
 North Little Rock, Ark., 160  
 North Platte, Nebr., 169, 213, 537  
 North Platte River, 211  
 North Pole, 714

Flights over, 516, 517

North Sea, 717

Northern Ireland. *See* Ireland

Northern Lights, 543

Northern Rhodesia. *See* Rhodesia

Northwest Ordinance, 746

Northwest Territories (Can.), 580

**Norway:**

General information, 676–78

Birth rate, 233

Currency: par value, 805

Death rate, 233, 780

Diplomats: U. S., 341

ECA: Allotments, 805

Emigration: to U. S., 226

Employment: rating, 779

Industry: production, 800

Industry: rating, 779

Labor: purchasing power, 782

Life expectancy, 231

MSA: allotments, 805

Merchant fleet: rating, 779

Telephones: rating, 779

Trade: rating, 779

Trade: with U. S., 800

United Nations, 377

World War II, 309, 413

Notre-Dame (Paris), 733

Nova Scotia, 580, 713

Novelists: Pulitzer Prizes, 507–

08

*See also* Literature

Nubian Desert, 719

Nuremberg Laws, 410

Nuremberg trials, 416

Nurses:

Number, 232

Training schools, 253

Nuts:

Imports, 802

Income: marketing, 788

Nyasaland, 572

Area and population, 561



Oak Park, Ill., 217

Oak Ridge, Tenn., 176, 276

Oakland, Calif., 217, 234, 247

Oath:

Constitutional, 365

Freeman's, 293

Olympic, 837

Presidential, 363

Oatis, William N., 419

Oats:

Prices: farm, 786

Production: world, 778

Observatories (astron.), 546

Ocean Island, 596

Oceania:

Area, 561, 715

British Commonwealth, 591–

96

Elevations, 715

Emigration: to U. S., 226

Exploration, 714

French territories, 632–33

Map, 144–45

Population, 561, 715

Religions, 482

Oceans: Dimensions, 717

Octagon: Area, 472

Odd Fellows (assn.), 750

O'Dwyer, William, 399

Office of Defense Mobilization,

331, 333

Office of Price Administration,

402

Office of Production Management,

402

Officers: Armed forces, 306, 334

Ogden, Utah, 217

Ohio:

General information, 173

Abbreviation, 212

Agriculture: statistics, 787

Altitudes, 209

Births: number, 229

Cities & towns, 223

Congress: members, 29, 32

Congress: representation,

292

Deaths: motor-vehicle, 235

Deaths: number, 229

Divorces: statistics, 238–39

Economy: statistics, 781

Education: statistics, 251,

252

Elections: statistics, 284–91

Executions: method, 242

Government, 201

Highest, lowest points, 209

Holidays, 499

Hospitals: number, 241

Map, 156

Marriages: statistics, 236

Motor vehicles: deaths, 235

Motor vehicles: laws, 244

Newspapers: number, 245

Places: by size, 223

Population: by sex, 222

Population: density, 218

Population: growth, 219–20

Population: marital status,

237

Population: racial, 221

Population: 21 yrs. & over,

222

Time zone, 151

Tornado (1933), 739

Unemployment: compensa-

tion, 95

Voting: qualifications, 293

Ohio River, 211

Ohm's Law: Discovery, 480

Oil industry:

Arabia, 692

Establishments, 789

Exports, 802

First oil well, 748

Hours worked, 798

Imports, 802

Indonesia, 647

Iran, 649

Iraq, 650

Middle East: map, 146

NATO vs Soviet bloc, 418

Oklahoma, 173

Pipelines: traffic, 792

Production: U. S., 760, 761,

785, 788

Production: world, 777

Rumania, 690

Tidelands Oil Bill, 301

United States, 761

Wages, 798

Okhotsk Sea, 717

Okinawa, 183, 416

**Oklahoma:**

General information, 173

Abbreviation, 212

Agriculture: statistics, 787

Altitudes, 209

Births: number, 229

Cities & towns, 223

Congress: members, 29, 32

Congress: representation,

292

Deaths: motor-vehicle, 235

Divorces: statistics, 238–39

Economy: statistics, 781

Education: Negroes, 254

Education: statistics, 251,

252

Elections: statistics, 284–91

Executions: method, 242

Government, 201

Highest, lowest points, 209

Holidays, 499

Hospitals: number, 241

Map, 154

Marriages: statistics, 236

Motor vehicles: deaths, 235

Motor vehicles: laws, 244

Newspapers: number, 245

Places: by size, 223

Population: by sex, 222

Population: density, 218

Population: growth, 219–20

Population: marital status,

237

Population: racial, 221

Population, 21 yrs. & over,

222

Time zone, 151

Unemployment: compensa-

tion, 95

Voting: qualifications, 293

Oklahoma City, Okla.:

General information, 194–95

Climate, 213

Government, 200

Longitude & latitude, 537

Magnetic declination, 537

Newspapers: leading, 247

Population: growth, 217

Time of day, 537

Old-age insurance, 92–93

Collections, 796

Old Faithful (geyser), 725

Old North Church, 185

Old Testament: Characters, 107–

10

Oleomargarine: Tax, 300

Olympia: Statue of Zeus, 714

Olympic Games, 830–37

Olympic National Park, 272

Omaha, Nebr., 170

Area, 217

Climate, 213

Newspaper: leading, 247

Population, 217

Oman and Masqat, 549

"One Horse Shay," 276

Onions: Prices, 783

Ontario, Lake, 208, 721

Ontario (prov.), 580

"Open door" policy, 352

Opera composers, 123–24

"Operation Big Switch," 421

Ophthalmoscope, 479

Optometrists: Number, 232

Orange Bowl (football), 844

Orange Free State, 574

Orange River, 721

Oranges: Prices, 783, 786

Oregon:

General information, 173–74

Abbreviation, 212

Agriculture: statistics, 787

Altitudes, 209

Births: number, 229



- Cities & towns, 223  
Congress: members, 29, 32  
Congress: representation, 292  
Deaths: motor-vehicle, 235  
Deaths: number, 229  
Divorces: statistics, 238-39  
Economy: statistics, 781  
Education: statistics, 251, 252  
Elections: statistics, 284-91  
Executions: method, 242  
Government, 201  
Highest, lowest points, 209  
Holidays, 499  
Hospitals: number, 241  
Map, 157  
Marriages: statistics, 236  
Motor vehicles: deaths, 235  
Motor vehicles: laws, 244  
Newspapers: number, 245  
Places: by size, 223  
Population: by sex, 222  
Population: density, 218  
Population: growth, 219-20  
Population: marital status, 237  
Population: racial, 221  
Population: 21 yrs. & over, 222  
Shore line, 214  
Time zone, 151  
Unemployment: compensation, 95  
Voting: qualifications, 293  
Organizations, 749-50  
Economic, 774-76  
Jewish, 496  
Sports, 806  
Oriental institute, 275  
Orinoco, 720  
Orkney Islands, 566  
Orlando, Fla., 217  
Orthodox Churches, 482, 483  
Orthodox Eastern Church, 746  
Orthopedic hospitals, 241  
Osaka, Japan, 657  
Oscars, *See* Academy Awards  
Oslo, Norway, 676  
Osteopaths: Number, 232  
Ottawa, Ontario, 537  
Outer Mongolia. *See* Mongolia  
Owensboro, Ky., 165  
Oxford Movement, 495  
Ozone: Discovery, 480
- P —**
- Pacific Ocean:  
Dimensions, 717  
Discovery, 713  
First flight over, 517  
U. S.: coastline, 214  
U. S.: water area, 208  
Pacific States:  
Economy: statistics, 781  
Population: 21 yrs. & over, 222  
Paducah, Ky., 165  
Pago Pago, Amer. Samoa, 181  
Pagodas: Famous, 733  
Painted Desert, 719  
Painters: Number, 233  
Pakistan:  
General information, 590-91  
Agriculture: rating, 777, 778  
Currency: par value, 805  
Diplomats: U. S., 342  
International Bank, 805  
Map, 135  
Trade, 801, 803  
United Nations, 376, 377  
U. S. wheat grant, 302  
Palestine, 376  
*See also* Israel; Jordan  
Palm Sunday, 496, 498  
Palomar Observatory, 546  
Pan-American Conferences, 404, 405  
Pan-American Union, 404  
Panama:  
General information, 678-79  
Birth rate, 233  
Currency: par value, 805  
Death rate, 233  
Diplomats: U. S., 342  
Holiday: national, 736  
Merchant fleet: rating, 779  
United Nations, 377  
U. S. intervention, 329  
Panama, Declaration of, 405  
Panama Canal, 181, 678-79  
Legislation, 294  
Statistics, 725  
Panama Canal Zone. *See* Canal Zone  
Panama City, Panama, 678  
Panay (gunboat), 404  
Pancake Tuesday, 496  
Panmunjom, Korea, 420, 421  
Pantheon, 732  
Papal States, 708  
Papen, Franz von, 410  
Paper currency: Portraits, 354  
Paper industry:  
Establishments, 789  
Exports, 802  
Hours worked, 798  
Imports, 802  
Prices, 790  
Production, 785  
Sales, 790  
Wages, 798  
Papua, 593  
Area & population, 561  
Par values: Currency, 805  
Parachutes: First jump, 515  
Paraguay:  
General information, 679-80  
Currency: par value, 305  
Diplomats: U. S., 342  
Holiday: national, 736  
International Bank, 805  
Trade: with U. S., 801  
United Nations, 377  
Parcel Post, 311-12  
Paris, France:  
Bibliothèque Nationale, 729  
Longitude & latitude, 536  
Museums, 730  
Notre-Dame, 732-33  
Population, 621  
Time of day, 536  
University of Paris, 728  
World War II, 413, 415  
Zoos, 731  
Parity prices: Farm, 786  
Parkersburg, W. Va., 178, 213  
Parks:  
City-owned parks, 183-99  
National Park System, 271-73  
State parks, 159-79  
Parkways, National, 273  
Parliament (England), 746  
Parliamentary procedure, 125-32  
Parochial schools, 253  
Parsec: Defined, 514  
Parthenon, 732  
Pasadena, Calif., 217, 546  
Passaic, N. J., 217  
Passengers. *See* Railroads  
Passover, 496, 498  
Patagonia, 551  
Patents: Procedure, 249  
Paterson, N. J., 217  
Patients: Hospital, 241  
Paul I (Greece), 638  
Paul Revere House, 185  
Pavlov, Ivan, 480  
Pawtucket, R. I., 217  
Pay:  
Armed forces, 306, 307  
Pay roll: state employees, 795  
*See also* Salaries; Wages  
Payments: U. S.: balance of, 804  
Payne-Aldrich Tariff, 294  
Peace: Nobel Prizes, 500-01  
"Peace in our Time," 411  
Peaks. *See* Mountains  
Peanuts: Prices, 786  
Pearl Harbor, 414  
Pedestrians: Deaths, 235  
Peiping, China, 601  
Peking, China. *See* Peiping  
Peloponnesian War, 746  
Pemba, 576  
Area & population, 561  
Pendulum clock: Invention, 479  
Penicillin: Discovery, 480  
Pennsylvania:  
General information, 174  
Abbreviation, 212  
Agriculture: statistics, 787  
Altitudes, 209  
Births: number, 229  
Cities & towns, 223  
Congress: members, 29, 32-33  
Congress: representation, 292  
Constitution: ratified, 358  
Deaths: motor-vehicle, 235  
Deaths: Number, 229  
Divorces: statistics, 238-39  
Economy: statistics, 781  
Education: statistics, 251, 252  
Elections: statistics, 284-91  
Executions: method, 242  
Government, 201  
Highest, lowest points, 209  
Holidays, 499  
Hospitals: number, 241  
Johnstown flood, 738  
Map, 152  
Marriages: statistics, 236  
Motor vehicles: deaths, 235  
Motor vehicles: laws, 244  
Newspapers: number, 245  
Places: by size, 223  
Population: by sex, 222  
Population: density, 218  
Population: growth, 219-20  
Population: marital status, 237  
Population: racial, 221  
Population: 21 yrs. & over, 222  
Shore line, 214  
Time zone, 151  
Unemployment: compensation, 95  
Voting: qualifications, 293  
Pennsylvania Academy of Fine Arts, 275-76  
Pensions: Veterans, 301  
Pentagon (math.): Area, 472  
Pentecost, 497, 498  
Hebrew Pentecost, 497  
Pentecostal Churches, 486  
People's party, 282, 283  
Peoria, Ill., 217  
Periodic table: Discovery, 480  
Perón, Juan D., 550  
Perpetual calendar, 539  
Persia. *See* Iran  
Persian empire, 726  
Persian Wars, 746

**Peru:**

General Information, 680-81  
 Birth rate, 233  
 Conquered, 714  
 Currency: par value, 805  
 Death rate, 233  
 Diplomats: U. S., 342  
 Holiday: national, 736  
 International Bank, 805  
 Minerals: rating, 777  
 Trade, 801, 803  
 United Nations, 377  
 Volcanoes, 723

**Pescadores, 604****Petition: Right of, 366****Petsamo, 620, 621****Pharmacists: Number, 232****Pharos: Alexandria, 714****Philadelphia, Pa.:**

General information, 195  
 Climate, 213  
 Continental Congress, 371  
 Deaths: motor-vehicle, 234  
 Government, 200  
 Longitude & latitude, 537  
 Magnetic declination, 537  
 Museums, 275-76  
 National Conventions, 280  
 Newspapers: leading, 247  
 Planetarium, 546  
 Population: growth, 217  
 Population: world rank, 737  
 Time of day, 537  
 Zoo, 731

**Philippines, Republic of:**

General information, 681-83  
 Agriculture: rating, 778  
 Aid: legislation, 300  
 Currency: Par value, 805  
 Diplomats: U. S., 342  
 Employment rating, 779  
 Independence: legislation, 296  
 Minerals: rating, 776, 777  
 Trade, 803  
 Treaty: U. S., 347  
 Typhoons, 739  
 United Nations, 377  
 Volcanoes, 722  
 World War II, 414, 415

**Phoenix, Ariz., 159**

Area, 217  
 Climate, 213  
 Heard Museum, 277  
 Longitude & latitude, 537  
 Magnetic declination, 537  
 Newspapers: leading, 247  
 Population, 217  
 Time of day, 537

**Phoenix Islands, 596****Photograph:**

Invention, 479  
 Statistics: U. S., 250

**Photography:**

Aerial: first, 515  
 Inventions, 479  
 Photographers: number, 232  
 Pulitzer Prizes, 506  
 Studios: number, 793

**Photosphere, 542****Physicians: Number, 232****Physics:**

Discoveries, 479-80  
 Formulas, 472  
 Nobel Prizes, 501-04  
 Thermometer scales, 473

**Pi (math): Defined, 474****Pica: Defined, 474****Pierce, Franklin:**

Biography, 320  
 Cabinet, 336  
 Election, 282  
 Family, 330

**Pierre, S. Dak., 537****Pig Iron. See Iron****Pikes Peak, 210****Pilgrims: American, 371, 746****Pilots: Airplane, 519****Pine Bluff, Ark., 160****Pines, Isle of, 633****Pipe (meas.): Defined, 474****Pisa: Leaning tower, 732****Pistol shooting, 849, 911****Pitcairn Island, 594****Pittsburgh, Pa.:**

General information, 195  
 Building: tallest, 742  
 Carnegie Institute, 276  
 Climate, 213  
 Deaths: motor-vehicle, 234  
 Government, 200  
 Longitude & latitude, 537  
 Magnetic declination, 537  
 Newspapers: leading, 247  
 Observatory, 546  
 Planetarium, 546  
 Population: growth, 217  
 Time of day, 537  
 "Pittsburgh of the South," 159  
 "Pittsburgh of the West," 161  
 Pittsfield, Mass., 217, 276  
 Pius XII, 708-09  
 Plague:  
   Black Death, 744  
   London, 746  
 Planetaria, 546  
 Planets, 544  
   As morning & evening stars, 538-41

**Plants: Classification, 480****Plassey, Battle of, 747****Plato, 726****Platt Amendment, 404****Platt National Park, 272****Platte River, 211****Pledge to Flag, 375****Pleiades (myth.), 116****Plumbing: Establishments, 789****Plurality: Defined, 293****Pluto (planet), 541, 544****Symbol, 542****Plymouth, Mass., 348****Plymouth Rock, 746****Pneumatic tire: Invention, 480****Pneumonia: Death rates, 228****Po River, 656****Pocatello, Idaho, 163****Pocket billiards, 867****Poetry: Pulitzer Prizes, 509-10****Point (meas.): Defined, 474****Point 4 Program, 300, 406****Point of Order, 131****Poisons: Deaths, 234****Poitiers, Battles of, 746, 747****Poland:**

General information, 683-85  
 Agriculture: rating, 778  
 Armed forces: rating, 780  
 Diplomats: U. S., 342  
 Emigration: to U. S., 226  
 Industry: rating, 779  
 Life expectancy, 231  
 Minerals: rating, 776, 777  
 Partitioning of, 747  
 United Nations, 377  
 World War II, 309, 413, 415

**Polar auroras, 543****Polar flights, 516, 517****Policemen: Number, 795****Polk, James K.:**

Biography, 319  
 Cabinet, 336  
 Election, 282  
 Family, 330  
 Minority President, 370

**Poll tax, 293****Polo, 874-76****1954 champions, 911****Measurements, 864****Olympic Games, 835****Polygamy: Mormons, 177****Pompeii: Destruction, 738****Ponce, Puerto Rico, 180****Pontiac, Mich., 217****Pontiffs. See Popes****Pony Express, 747****Pool Parlor: Number, 793****Popes, 493-94****Plus XII, 709****Popocatepetl, 716****Population:**

U. S. (1790-1950), 208  
 U. S. (1950-54 est.), 214  
 U. S.: by color, sex, age, 224  
 U. S.: by race, 221  
 U. S.: by sex, 222  
 U. S.: cities (1910-50), 215-18  
 U. S.: density by state, 218  
 U. S.: farm, 786  
 U. S.: foreign-born, 227  
 U. S.: marital status, 237  
 U. S.: states (1790-1950), 219-20  
 U. S.: states (1953 est.), 159-79  
 U. S.: 21 yrs. & over, 222  
 U. S.: urban & rural, 222  
 U. S.: with territories, 223  
 World, 715  
 World: cities, 737  
 World: countries, 736  
 World: high densities, 715

**Populists. See People's party****Pork: Prices, 783****Port Arthur, Kwantung, 605****Port Arthur, Ont., 537****Port Arthur, Tex., 217****Port Chicago, Calif., 739****Portland, Maine:**

General information, 195-96  
 Climate, 213  
 Government, 200  
 Longitude & latitude, 537  
 Magnetic declination, 537  
 Newspaper: leading, 247  
 Population: growth, 217  
 Time of day, 537

**Portland, Oreg.:**

General information, 196  
 Climate, 213  
 Government, 200  
 Longitude & latitude, 537  
 Magnetic declination, 537  
 Newspapers: leading, 247  
 Population: growth, 217  
 Time of day, 537

**Portraits: Paper currency, 354****Portsmouth, N. H., 170, 747****Portsmouth, Va., 177, 217, 247****Portugal:**

General information, 685-89  
 Birth rate, 233  
 Death rate, 233  
 Diplomats: U. S., 342  
 ECA: allotments, 805  
 Earthquake (1755), 738  
 Emigration: to U. S., 226  
 Life expectancy, 231  
 MSA: allotments, 805

**Overseas Territories, 687-89****Portuguese East Africa. See Mozambique****Portuguese Guinea. See Guinea****Portuguese India. See India****Portuguese West Africa. See Angola****Positron: Discovery, 480****Post Office Dept., U. S., 331, 334****Postmasters General, 335-38****Postal communications:****Regulations, 311-14**

UPU, 380  
 Postal savings, 784  
 First bank, 749  
**Potatoes:**  
   Consumption, 783  
   Prices, 783, 786  
   Production: U. S., 787  
   Production: world, 778  
 Potsdam Conference, 344-45, 416  
 Poughkeepsie Regatta, 846-47  
   Consumption, 783  
**Poultry:**  
   Consumption, 783  
   Income: marketing, 788  
**Pound (weight):** Defined, 471  
**Power loom:** Invention, 479  
 Prague, Czechoslovakia, 609-10  
 Preakness Stakes, 885  
**Precipitation.** *See* Rainfall;  
   Snowfall  
**Premature births:** Death rates,  
   228  
 Presbyterian Church, 484-85  
   Scotland, 747  
**Presidents:**  
   Colleges, 257-71  
   Confederacy, 338  
   Continental Congresses, 372  
   France, 121  
   Texas Republic, 190  
**Presidents (U. S.):**  
   Biographies, 315-27  
   Bricker Amendment, 302  
   Cabinets, 335-38  
   Elections (1789-1952), 281-91  
   Elections: procedure, 279,  
     363, 367  
   Emergency powers (1951),  
     300  
   Executive Office, 331, 333  
   Families, 330  
   Inauguration date, 279  
   List of, 328  
   Minority Presidents, 370  
   "Mother of Presidents," 177  
   Numbering of, 327  
   Oath, 363  
   Powers, 362  
   Qualifications, 363  
   Religions, 328  
   Salary, 299, 329  
   Succession, 280, 299, 369  
   Term: end of, 369  
   Terms: limit to, 369  
   Veto power, 361  
   White House, 340  
**Presiding at meetings,** 125-32  
**Press, Freedom of,** 366, 745  
**Prices:**  
   Automobiles, 785  
   Consumer, 757, 783  
   Controls, 402  
   Electric appliances, 785  
   Farm, 786  
   Farm: and value, 788  
   Farm: legislation, 300  
   Foods, 783  
   Frozen (1951), 403  
   Indexes, 790  
   OPA, 402  
   Parity: farm, 786  
   Retail: food, 783  
**Prime Ministers:**  
   British, 120  
   Canadian, 578-79  
 Prince Edward Island, 580  
 Prince of Wales (battleship), 414  
 Principe, 687, 688  
**Printing:**  
   Hours worked, 798  
   Inventions, 479  
   Production, 785  
   Wages, 798  
*See also* Publishing

**Prism:** Volume, 472  
**Prisoners:** Federal, 242  
**Private schools,** 252, 254  
**Prizes.** *See* Awards  
**Procedure:** Parliamentary, 125-  
   32  
**Production.** *See* Agriculture;  
   Industry; Manufacturing  
**Professional schools,** 252, 253  
**Professions:** Number, 232  
**Progressive party** (1912), 283,  
   291  
**Progressive party** (1924), 283, 291  
**Progressive party** (1948), 289  
**Progressive party** (1952), 290  
**Prohibition:**  
   Established, 295, 368  
   Kansas repeals, 165  
   Repealed, 369  
   States having, 168, 173  
   Volstead Act, 295  
**Prohibition party,** 282-90  
**Pronunciations:** Troublesome,  
   46-57  
**Prophets:** Old Testament, 110  
**Prostitution:** Arrests, 243  
**Protestant Churches,** 482-86  
**Protestant Episcopal Church,** 486  
   Bishops, 487-88  
**Proton:** Discovery, 480  
**Providence, R. I.:**  
   General information, 196  
   Climate, 213  
   Government, 200  
   Longitude & latitude, 537  
   Magnetic declination, 537  
   Newspaper: leading, 247  
   Population: growth, 217  
   Time of day, 537  
**Provo, Utah,** 176  
**Prunes:** Prices, 783  
**Prussia:** Kings, 122  
**Psychoanalysis:** Discovery, 480  
**Public debt.** *See* Debt  
**Public schools,** 251-55  
**Public utilities:**  
   Construction, 795  
   Electrical output, 789  
   Employment, 798  
   Establishments, 784  
   Hours worked, 799  
   Injuries, 800  
   SEC, 297  
   Wages, 799  
**Public welfare:** Employees, 795  
**Publishing:**  
   Advertising, 793  
   Hours worked, 798  
   Magazines: leading, 248  
   Newspapers: by state, 245  
   Newspapers: leading, 246-47  
   Production, 785  
   Wages, 798  
**Pueblo, Colo.,** 161, 217  
**Puerto Rico:**  
   General information, 180  
   Agriculture: rating, 778  
   Birth rate, 233  
   Congress: member, 33  
   Constitution, 301  
   Death rate, 233  
   Holidays, 499  
   National Convention dele-  
     gates, 279  
**Puget Sound,** 208  
**Pulitzer Prizes,** 505-10  
**Pullman strike,** 747  
**Pump, air:** Invention, 479  
**Punic Wars,** 747  
**Pupils.** *See* Schools  
**Pure Food and Drug Act,** 294  
**Purim,** 498  
**Puritan rebellion,** 495  
**Pygmies,** 481

**Pyramids:**  
   Egypt, 714  
   Volume: formula for, 472  
**Pyrenees,** 694

## — Q —

**Qatar,** 549-50  
**Quadrant:** Defined, 470  
**Quadruplets:** Number born, 221  
**Quakers,** 486  
**Quantum theory,** 480  
**Quarrying,** 784, 799, 800  
   *See also* Stone industry  
**Quebec (prov.),** 580  
**Quebec, Que.:**  
   Bridge, 735  
   Longitude & latitude, 537  
   Magnetic declination, 537  
   Population, 580  
   Time of day, 537  
   Zoo, 731  
**Queen Mary (ship),** 743  
**Queens (boro.):**  
   Area & population, 217  
   Borough president, 193  
   *See also* New York, N. Y.  
**Queensberry rules,** 838  
**Quincy, Mass.,** 217  
**Quintal,** 474  
**Quintuplets:**  
   Dionne, 397  
   Number born, 221  
**Quire:** Defined, 474  
**Quisling:** Origin of term, 676  
**Quiz show:** First with panel,  
   748

## — R —

**R.C.A. Building,** 742  
**Rabbinical organizations,** 496  
**Rabies:** Preventive, 480  
**Race riots:** Detroit, 398  
**Race tracks:** Number, 793  
**Races (peoples),** 481  
   Births: U. S., 229  
   Population: by state, 221  
   Population: U. S., 224  
**Racine, Wis.,** 217  
**Racing:**  
   Auto racing, 891-92, 905  
   Harness racing, 850-51  
   Horse racing, 879-90  
**Racquets (game),** 848-49, 906  
**Radars:** Hits moon, 398  
**Radio industry:**  
   Advertising, 793  
   First panel quiz show, 748  
   Inventions, 479-80  
   Networks, 248  
   Operators, 250  
   Sales, 785  
   Sets: homes with, 250, 752  
   Stations: by city, 183-99  
   Stations: U. S., 248  
**Radioactivity:** Discovery, 480  
**Radios:**  
   Number: by city, 183-99  
   Number: by continent, 250  
   Number: U. S., 250  
   Sales, 785  
**Radius:** Earth, 545  
**Ragnarok,** 118  
**Railroads:**  
   Accidents: famous, 742  
   Army takes over (1943), 402  
   Cape-to-Cairo Railroad, 744  
   Carloadings, 796  
   Construction, 795



**Railroads—(cont.)**

Countries: leading, 779  
Deaths: accidental, 234, 235  
Development: U. S., 764  
Domestic traffic, 791  
First steam railroad, 749  
Freight, 791  
Hours worked: limit, 294  
Injuries, 800  
Legislation, 294  
Passengers, 792  
Pioneer railroad: U. S., 184  
Published rates: deviations, 294  
RFC, 296  
Rates: right to alter, 294  
Retirement: collections, 796  
Social Security, 94  
Strike (1951), 403  
Transcontinental: first, 749

**Rainfall:**

Cities: U. S., 213  
Records: world, 725-26

**Rainier, Mt., 210****Raleigh, N. C.:**

Area, 217  
Climate, 213  
Longitude & latitude, 537  
Magnetic declination, 537  
Newspaper: leading, 247  
Population, 217  
Time of day, 537

**Rangoon, Burma, 598**

Ranks: Armed forces, 306, 307

**Rape: Arrests, 243****Rapid City, S. Dak., 175****Rasputin: Murdered, 747****Rationing, 402****Rayon:**

Invention, 479  
Yarn: consumption, 785

**Reading, Pa., 217**

Real estate: Establishments, 784

Ream (meas.): Defined, 474

Reaper: Invention, 479

Recipe section, 64-82

**Reciprocal Trade Agreements**

Acts, 297, 301, 302

**Reconstruction Finance Corpora-**

tion, 296

Abolished, 302

**Records:**

Aviation, 518-19

Steamship, 743

See also Sports

**Recreation. See Amusement**

Rectangle: Area, 472

Red River, 211

Red Sea, 717

**Reformation:**

Events, 747

Germany, 633

Universities, 728

**Refrigerators:**

In homes, 752, 764

Sales, 785

Refugee Immigration Act, 302

Registered mail, 312-13

Reichstag building: Burned, 410

Reign of Terror (France), 745

Relativity: Theories, 489

Relief: Families on (1935), 401

Religion, 482-99

Antipopes, 492

Archbishops of Canterbury, 495

Cardinals, 490-92

Churches: U. S., 482-86

England, 495

Freedom of, 366

Holidays, 496-98

Jewish organizations, 496

Memberships, 482-86

Methodist bishops, 488

Of U. S. Presidents, 328

Popes, 493-94

Protestant Episcopal bish-

ops, 487-88

Roman Catholic hierarchy,

488-90

Remington, William R., 399

Renaissance, 747

Structures: famous, 732-33

Universities, 728

Reno, Nev., 170, 537

Rents: OPA, 402

Repair services, 793

Repeal of prohibition, 369

Representatives. See House

Republic: Oldest, smallest, 692

Republican party:

Congress: strength, 29

Elections (1856-1952), 282-91

Formation, 350

National Committee: 330

National Conventions, 279,

280

State voting longest for, 177

Repulse (battle cruiser), 414

Residence:

For divorce, 239

For voting, 293

Residential schools, 254

Resources:

U. S., 761-62

World, 776-80

Rest hospitals, 241

Restaurants:

Number, 789

Sales, 791

Retail trade:

Chain stores, 790

Consumer goods, 785

Development: U. S., 766

Employment, 798

Establishments, 784, 789

Farms: prices & value, 788

Food: prices, 783

Hours worked, 799

Injuries, 800

Prices, 783, 785, 788

Sales, 791

Sales: by state, 781

Sales: leading outlets, 791

Wages, 799

Reuben James (destroyer), 405

Réunion, 629

Area & population, 623

Volcano, 722

Revenue:

Cities, 183-99

Government: U. S., 796,

797

States, 159-79

Revere, Paul:

Paul Revere House, 185

Ride, 167

Reversing layer, 542

Review of the Year:

Books, 16-17

Movies, 21-22

Sports, 14-16

Theater, 19-20

Television, 18-19

Revolutionary War, 744

Revolver: Invention, 479

Rhee, Syngman, 681

Rhine, 636

Crossed by 3rd Army, 416

Rhode Island:

General information, 174-75

Abbreviation, 212

Agriculture: statistics, 787

Altitudes, 209

Births: number, 229

Cities & towns, 223

Coastline, 214

Congress: members, 29, 33

Congress: representation,

292

Constitution: ratified, 358

Deaths: motor-vehicle, 235

Deaths: number, 229

Divorces: statistics, 238-39

Economy: statistics, 781

Education: statistics, 251-52

Elections: statistics, 284-91

Government, 201

Highest, lowest point, 209

Holidays, 499

Hospitals: number, 241

Map, 152

Marriages: statistics, 236

Motor vehicles: deaths, 235

Motor vehicles: laws, 244

Newspapers: number, 245

Places: by size, 223

Population: by sex, 222

Population: density, 218

Population: growth, 219-20

Population: marital status,

237

Population: racial, 221

Population: 21 yrs. & over,

222

Shore line, 214

Time zone, 151

Unemployment: compensa-

tion, 95

Voting: qualifications, 293

Rhodes: Colossus, 714

Rhodesia, Northern, 572

Area & population, 561

International Bank, 805

Minerals: rating, 776

Rhodesia, Southern, 572-73

Area & population, 561

International Bank, 805

Minerals: rating, 776, 777

Trade: with U. S., 801

Ribbentrop, Joachim von, 411

Riboflavin: In foods, 476

Rice:

Prices: farm, 786

Production: world, 778

Riches: World, 776-80

Richfield, Utah, 537

Richmond (boro.):

Area & population, 217

Borough President, 193

See also New York, N. Y.

Richmond, Calif., 217

Richmond, Va.:

General information, 197

Climate, 213

Government, 200

Longitude & latitude, 537

Magnetic declination, 537

Museum of Fine Arts, 278

Newspapers: leading, 247

Population: growth, 217

Time of day, 537

Ridgway, Gen. Matthew B., 420

Rifles:

Automatic: invention, 479

Rifle shooting (sport), 911

Riga, Latvia, 662

Riga, Treaty of, 406

Ringing Museum, 278

Rio de Janeiro, Brazil, 557

Rio de Janeiro, Treaty of, 406

Rio Grande, 212, 720

Rivers:

Of Underworld, 116

U. S., 211-12

World, 720-21

Roads:

Highest auto road, 161

Mileages, 202-03

Roanoke, Va., 217, 537

Robbery: Arrests, 243

Robot-bombing of England, 415

- Rochester, Minn., 168  
 Rochester, N. Y.:  
   General information, 197  
   Government, 200  
   Newspapers: leading, 247  
   Population: growth, 217  
 Rock Hill, S. C., 175  
 Rock Springs, Wyo., 179  
 Rockefeller Center, 734  
 Rockefeller Foundation, 750  
 Rocket engine flight: First, 517  
 Rockford, Ill., 217  
 Rocky Mountain National Park, 272  
 Roehm, Ernst: Purge, 410  
 Roller skating, 909  
 Roman Catholic Church:  
   Antipopes, 492  
   Archbishops, 488-89  
   Bishops, 489-90  
   College of Cardinals, 490-92  
   Counter Reformation, 745  
   England, 495  
   France, 624  
   Inquisition, 746  
   Italy, 655-56  
   Membership, 482, 483  
   Pius XII, 709  
   Popes, 493-94  
   Schism with Eastern Church, 746  
   Vatican City State, 708-09  
 Roman empire, 747  
   Christianity, 744  
 Roman mythology, 111-17  
 Roman numerals, 473  
 Rome, Italy:  
   Founded, 747  
   Libraries, 729  
   Longitude & latitude, 536  
   Population, 654  
   Structures, 732-33  
   Time of day, 536  
   World War II, 415  
 Roosevelt, Eleanor, 330  
 Roosevelt, Franklin D.:  
   Biography, 326  
   "Arsenal of Democracy," 402  
   Assassination attempt, 342  
   Cabinet, 338  
   Condemns "economic royalists," 401  
   Elections, 285-88  
   Family, 330  
   First " Fireside Chat," 400  
   Good-neighbor policy, 404  
   Nominations, 280  
   "One third of the nation," 401  
   Proclaims unlimited emergency, 405  
   Promises New Deal, 400  
   "Quarantine" of aggressors, 404  
   "Shoot first" order, 405  
   Supreme Court plan, 398  
   Vice Presidential candidate, 283  
 Roosevelt, Theodore:  
   Biography, 323-24  
   Assassination attempt, 342  
   Cabinet, 337  
   Elections, 282, 283, 291  
   Family, 330  
   Hall of Fame, 514  
   Mt. Rushmore carving, 175  
   Nomination, 280  
   Roosevelt Museum, 274  
 Roosevelt Dam, 734  
 Roque, 899  
 Rose Bowl (football), 843  
 Rosenberg, Julius & Ethel, 399  
 Roses, Tournament of, 191  
 Roses, Wars of the, 748  
 Rosetta Stone, 730  
 Rosh Hashana, 497, 498  
 Rosicrucian Museum, 278  
 Ross, Betsy, 373  
 Ross Dependency, 596  
 Roswell, N. Mex., 171  
 Rotary International, 750  
 Rotterdam, Netherlands, 672  
 Rowing, 846-47  
   1954 champions, 902  
   College, 900, 902  
   Olympic Games, 836-37  
 Royal Canadian Mounted Police, 579  
 Royal Gorge, 161  
 Royal Oak (battleship), 413  
 Ruanda-Urundi, 556  
 Rubber industry:  
   Hours worked, 798  
   Imports, 802  
   Manufactures: exports, 802  
   Production: U. S., 785  
   Production: world, 778  
   Vulcanizing: invention, 479  
   Wages, 798  
 Ruhr, 636  
   Occupied (1923), 410  
 Rulers:  
   England, 119-20  
   France, 121  
   Prussia & Germany, 122  
   Russia, 122  
 Rumania:  
   General information, 689-91  
   Birth rate, 233  
   Death rate, 233  
   Diplomats: U. S., 342  
   Emigration: to U. S., 226  
   Minerals: rating, 777  
   World War II, 299, 309, 413  
 Rural population, 222  
 Rural territory, 223  
 Rurutu, 632-33  
 Rushmore, Mt.: Carvings, 175  
 Russell Sage Foundation, 750  
 Russia: See Union of S.S.R.  
 Russian Orthodox Church, 483  
 Russian Revolution, 406  
 Russo-Japanese War, 747  
 Russo-Turkish War, 747  
 Ruth, Babe, 814, 817  
 Rutland, Vt., 177  
 Ryder Cup, 825  
 Rye: Farm prices, 786  
 Ryukyu Islands, 183, 722
- S —
- Saar, 638  
 Plebiscite, 410  
 Sacramento, Calif.:  
   Area, 217  
   Longitude & latitude, 537  
   Magnetic declination, 537  
   Newspaper: leading, 247  
   Population, 217  
   Time of day, 537  
 Saginaw, Mich., 217  
 Sahara Desert, 713, 719  
 St. Albans, Vt., 177  
 St. Augustine, Fla., 163  
 St. Bartholomew massacre, 747  
 St. Clair, Lake, 208  
 St. Cloud, Minn., 168  
 St. Helena, 573  
   Area & population, 561  
 St. John, New Brunswick, 537  
 St. Joseph, Mo., 217  
 St. Lawrence River, 713, 720  
 St. Lawrence Seaway, 302  
 St. Louis, Mo.:  
   General information, 197-98  
 City Art Museum, 278  
 Climate, 213  
 Deaths: motor-vehicle, 234  
 Government, 200  
 Longitude & latitude, 537  
 Magnetic declination, 537  
 National Conventions, 280  
 Newspapers: leading, 247  
 Population: growth, 217  
 Time of day, 537  
 St. Mihiel, Battle of, 748  
 St. Patrick's Day, 496  
 St. Paul, Minn., 168  
   Area & population, 217  
   Climate, 213  
   Government, 200  
   Newspapers: leading, 247  
 St. Peter's (Vatican), 733  
 St. Petersburg, Fla., 217  
 St. Pierre and Miquelon, 631  
   Area and population, 623  
 St. Valentine's Day, 496, 747  
 St. Valentine's Day Massacre, 747  
 Saipan, 183  
 Sakhalin, 717  
 Salaries:  
   City governments, 200  
   Federal government, 299, 329  
   State governments, 201  
   Teachers, 251, 254  
 Salem, Mass., 748  
 Salem, Oreg., 174  
   Newspapers: leading, 247  
   Population, 217  
   Time of day, 537  
 San Domingo. See Dominican Republic  
 San Francisco, Calif.:  
   General information, 198-99  
   Bridges, 735  
   Climate, 213  
   Deaths: motor-vehicle, 234  
   Earthquake, 738  
   Government, 200  
   Longitude & latitude, 537  
   Magnetic declination, 537  
   Museums, 276, 278  
   National Convention, 280  
   Newspaper: leading, 247  
   Planetarium, 546  
   Population: growth, 217  
   Time of day, 537  
 San Jacinto, Battle of, 747  
 San Jose, Calif., 217, 278  
 San Juan, Puerto Rico, 180  
 San Juan Hill, Charge of, 747  
 San Marino, Calif., 277  
 San Marino (republic), 692, 715  
 San Pedro, Calif., 160  
 Sandwich Islands, 180  
 Sanitation: Employees, 795  
 Santa Anita Derby, 885  
 Santa Anita Handicap, 885  
 Santa Claus: Name origin, 490  
 Santa Cruz Islands, 722  
 Santa Fe, N. Mex., 171, 277, 53  
 Santa Monica, Calif., 217  
 Santiago (Chile), 589  
 Sao Paulo, Brazil, 557  
 São Tomé, 688  
   Area & population, 687  
 Sarasota, Fla., 278  
 Saratoga, Battle of, 744  
 Sarawak, 584  
   Agriculture: rating, 778  
   Area & population, 561  
 Sardinia, 656  
 Saskatchewan, 580  
 Saturn (planet), 539, 544  
   Symbol, 542  
 Saudi Arabia:  
   General information, 692  
   Area & population, 549  
   Diplomats: U. S., 342

**Saudi Arabia—(cont.)**

Minerals: rating, 777  
Trade, 803  
United Nations, 377  
Sault Ste. Marie, Mich., 213, 537

Sault Ste. Marie Canals, 725  
Savannah, Ga., 217, 537  
Savings: By type & year, 784  
Savings bank: First, 749  
Savonarola, 747

Saxons, 560  
Scales: Thermometer, 473  
Scarlet fever: Death rate, 228  
Scharnhorst (battleship), 415  
Schenectady, N. Y., 217  
Schenley Park, 195  
Schick test: Discovery, 480  
Schleier Gallery, 277

**Schools:**

Attendance laws, 252  
Construction, 795  
Federal aid, 257  
Negroes, 254  
Private schools, 253, 254  
Public schools, 251-55  
Vocational schools, 252  
*See also* Colleges; Education

**Schuman Plan, 419****Science, 470-81**

Calories, 476  
Chemical elements, 477-78  
Discoveries, 480  
Inventions, 479-80  
Measures, 470-75  
Museums, 274-78  
Museums: world, 730-31  
Races of mankind, 481  
UNESCO, 380  
Vitamins, 476  
Weights, 470-75

**Scopes Evolution Trial, 747**

Score (meas.): Defined, 474

**Scotland:**

Area & population, 562  
Emigration: to U. S., 226  
*See also* Great Britain

**Scott, Dred, 745****Scranton, Pa., 217, 537****Screw propeller: Invention, 479****Sea mile: Defined, 474****Seas: Dimensions, 717****Seasons: Change, 543-44****Seattle, Wash.:**

General information, 199  
Climate, 213  
Deaths: motor-vehicle, 234  
Government, 200  
Longitude & latitude, 537  
Magnetic declination, 537  
Newspaper: leading, 247  
Population: growth, 217  
Time of day, 537

**Secession:**

Alabama, 159  
Arkansas, 160  
Florida, 162  
Georgia, 162  
Louisiana, 166  
Mississippi, 168  
North Carolina, 172  
South Carolina, 175  
Tennessee, 175  
Texas, 176  
Virginia, 177

**Second International, 746****Secondary schools, 251-54****Secondhand stores: Number, 789****Secretn: Isolation, 480****Securities and Exchange Commission, 297, 333, 334****Security Council. *See* United Nations****Seeing Eye Training School, 171****Segregation: Banned in schools, 10****Selective Service:**

Act: legislation, 298, 299, 300, 301

Act: violators, 242

Classifications, 305

Registration: first, 405

Self-employed: Number, 798

Self-starter: Invention, 479

**Senate (U. S.):**

Committees, 30

Composition, 360

Election to, 368

First president pro tempore, 749

First woman elected to, 749

Impeachments, 339, 360

Members, 29-30

Qualifications, 360, 367

Salaries, 329

Terms, 29-30

Terms: end of, 369

Treaty of Versailles, 404

Vice President elected by, 279

World Court, 404

**Senegal, 627**

Area & population, 623

Seoul, Korea, 419, 420, 661-62

September Massacres, 745

Sequoia National Park, 272

Serbia, 711

Serfdom: Russia, 703

Seven Falls, 718

Seven Weeks' War, 552

Seven Wonders, 714

Seven Years' War, 747

Seventeenth Amendment, 367

Seventh Day Adventists, 486

Seward, William H., 342

Seward, Alaska, 179

"Seward's Folly," 179

Sewers: Construction, 795

Sewing machine: Invention, 479

Sex offenses: Arrests, 243

Seychelles, 573

Area & population, 561

Seymour Planetarium, 546

Shabuoth, 497, 498

**Shanghai, China:**

Japanese invasion, 412

Longitude & latitude, 536

Population, 601

Time of day, 536

Shannon River, 651

Shasta, Mt., 210, 716

Shay's Rebellion, 747

**Sheep:**

On farms, 787

Production: world, 778

Shemini Atzereth, 498

Shenandoah (dirigible), 741

Shenandoah National Park, 272

Sheridan, Wyo., 179

Sherman's March, 744

Shetland Islands, 713

Shintoists: Number, 482

**Ships:**

Atlantic passages, 743

U. S. Navy, 308

Wrecks: famous, 740

**Shoes:**

Repair shops: number, 793

Sales, 791

Shine parlors: number, 793

Stores: leading, 791

**Shooting:**

Galleries: number, 793

Rifle & pistol, 849

Shooting stars, 546

Shoreline: By state, 214

Shreveport, La., 217, 247, 537

Shrove Tuesday, 496, 498

**Si Kiang, 720**

Siam. *See* Thailand

Sielly, 656

Earthquake (1908), 738

World War II, 415

Sideral time, 522, 545

Siegfried Line, 415

Sierra Leone, 573

Area & population, 561

Discovered, 713

**Silver:**

Nationalized (1934), 401

Production, 777

Silver City, N. Mex., 537

Simhath Torah, 498

**Singapore:**

General information, 586-87

Area & population, 561

Longitude & latitude, 536

Time of day, 536

World War II, 414

**Singer Building, 742****Single persons:**

Number, 237

Per cent who marry, 240

**Sinkiang, 604**

Sioux City, Iowa, 217

Sioux Falls, S. Dak., 217, 537

Sit-down strikes, 401, 402

Sitka, Alaska, 537

Sixteenth Amendment, 367

Skagarrak, 612

**Skating:**

Ice skating, 858-59, 895

Rinks: number, 793

Roller skating, 909

Skeet shooting, 910

Skiing, 856, 900, 905

Highest artificial jump, 168

Skyscraper: First, 749

**Slavery:**

American Colonies, 747

British Empire, 747

Compromise of 1850, 744

Dred Scott case, 745

First state to forbid, 177

Kansas-Nebraska Act, 350, 746

Missouri Compromise, 746

Northwest Ordinance, 746

Prohibited, 367

Sloan Foundation, Inc., 750

Small Business Administration,

302, 333, 334

Smith, Alfred E., 280, 284

Smith Act, 298

Smithsonian Institution, 275

Snake River, 212

**Snowfall:**

U. S. cities, 213

World: records, 726

Snyder-Gray case, 747

Soccer, 860, 911

**Social Security:**

Legislation, 297, 300, 301, 302

Program, 92-95

Socialist Labor party, 284-90

Socialist Party, 283-90

Societies, 749-50

Sports, 806

Society Islands, 632-33

Socrates, 726

Soda: Solvay process, 480

Sofia, Bulgaria, 596

Softball, 825, 917

Soil Conservation Act, 297

Solar system: Heliocentricity, 480

Solar time, 522

Solomon Islands, 596

Area & population, 561

World War II, 415

Solstices, 543

Solvay process, 480



- Somalia, 657  
 Somaliland, British, 573-74  
   Area & population, 561  
 Somaliland, French, 627  
   Area & population, 623  
 Somaliland, Italian. *See* Somalia  
 Somerville, Mass., 217  
 Somme, Battles of, 748  
 Songs: State, 159-79  
 "Sooners": Defined, 173  
 Sorbonne, 728  
 Sorghum grain: Prices, 786  
 Sorority: First, 749  
 Sound:  
   First flight faster than, 517  
   Speed, 472  
 Sound picture: First, 479  
 South Africa, Union of:  
   General information, 574-75  
   Agriculture: rating, 778  
   Area & population, 561  
   Birth rate, 779  
   Death rate, 780  
   Employment: rating, 779  
   International Bank, 805  
   Life expectancy, 231  
   Minerals: rating, 776, 777  
   Trade, 801, 803  
   United Nations, 377  
   World War II, 428  
 South America:  
   Area, 715  
   Dimensions, 715  
   Elevations, 715  
   Emigration: to U. S., 226  
   Exploration, 714  
   Map, 147  
   Population, 715  
   Religions, 482  
 South Atlantic States:  
   Economy: statistics, 781  
   Population: 21 yrs. & over, 222  
 South Bend, Ind., 217  
 South Carolina:  
   General information, 175  
   Abbreviation, 212  
   Agriculture: statistics, 787  
   Altitudes, 209  
   Births: number, 229  
   Cities & towns, 223  
   Congress: members, 29, 33  
   Congress: representation, 292  
   Constitution: ratified, 358  
   Deaths: motor-vehicle, 235  
   Deaths: number, 229  
   Divorces: statistics, 238-39  
   Economy: statistics, 781  
   Education: Negroes, 254  
   Education: statistics, 251, 252  
   Elections: statistics, 284-91  
   Executions: method, 242  
   Government, 201  
   Highest, lowest points, 209  
   Holidays, 499  
   Hospitals: number, 241  
   Map, 153  
   Marriages: statistics, 236  
   Motor vehicles: deaths, 235  
   Motor vehicles: laws, 244  
   Newspapers: number, 245  
   Places: by size, 223  
   Population: by sex, 222  
   Population: density, 218  
   Population: growth, 219-20  
   Population: marital status, 237  
   Population: racial, 221  
   Population: 21 yrs. & over, 222  
   Shore line, 214  
   Time zone, 151  
   Unemployment: compensation, 95  
   Voting: qualifications, 293  
 South China Sea, 717  
 South Dakota:  
   General information, 175  
   Abbreviation, 212  
   Agriculture: statistics, 787  
   Altitudes, 209  
   Births: number, 229  
   Cities & towns, 223  
   Congress: members, 29, 33  
   Congress: representation, 292  
   Deaths: motor-vehicle, 235  
   Deaths: number, 229  
   Divorces: statistics, 238-39  
   Economy: statistics, 781  
   Education: statistics, 251-252  
   Elections: statistics, 284-91  
   Executions: method, 242  
   Government, 201  
   Highest, lowest points, 209  
   Holidays, 499  
   Hospitals: number, 241  
   Map, 155  
   Marriages: statistics, 236  
   Motor vehicles: deaths, 235  
   Motor vehicles: laws, 244  
   Newspapers: number, 245  
   Places: by size, 223  
   Population: by sex, 222  
   Population: density, 218  
   Population: growth, 219-20  
   Population: marital status, 237  
   Population: racial, 221  
   Population: 21 yrs. & over, 222  
   Time zone, 151  
   Unemployment: compensation, 95  
   Voting: qualifications, 293  
 South Gate, Calif., 217  
 South Platte River, 212  
 South Pole, 714  
   First flight over, 517  
 South Portland, Maine, 166  
 South-West Africa, 575-76  
   Area & population, 561  
 Southampton (Isl.), 717  
 Southern Lights, 543  
 Southwest Museum, 278  
 Soviet bloc: Economic strength, 418  
 Soybeans: Prices, 786  
 Spain:  
   General information, 693-94  
   Agriculture: rating, 778  
   Aid: legislation, 300, 301  
   Armed forces: rating, 780  
   Birth rate, 233  
   Civil war, 412  
   Death rate, 233, 780  
   Diplomats: U. S., 342  
   Emigration: to U. S., 226  
   Franco: recognized by U. S., 404  
   Industry: rating, 779  
   Inquisition, 746  
   Life expectancy, 231  
   Structures, 733  
   Trade, 803  
 Span (meas.): Defined, 474  
 Spanish-American War:  
   Casualties, 308  
   Events, 747  
 Spanish Armada, 747  
 Spanish Guinea. *See* Guinea  
 Spanish Morocco. *See* Morocco  
 Sparks, Nev., 170  
 Spartanburg, S. C., 175  
 Speakers of House:  
   List, 340  
   Salary, 329  
 Special delivery mail, 312  
 Spectrum analysis, 480  
 Speech: Freedom of, 366  
 Speed:  
   Falling body, 472  
   Light, 545  
   Light: discovery, 480  
   Records: aviation, 518-19  
   Records: steamships, 743  
   Sound, 472  
   Speed limits: by state, 244  
 Speed skating, 859  
 Spending. *See* Expenditure  
 Sphere: Volume, 472  
 Sphinx, 732  
   Riddle of, 116  
 Spinning: Inventions, 479  
 Spirit of St. Louis (plane), 275  
 Spiritualists, 486  
 Spitsbergen, 677-78, 714  
 Spokane, Wash.:  
   Area, 218  
   Climate, 213  
   Government, 200  
   Longitude & latitude, 537  
   Magnetic declination, 537  
   Newspaper: leading, 247  
   Population, 218  
   Time of day, 537  
 Spooner Bill, 294  
 Sports, 806-917  
   Athletes "greatest," 837  
   Athletes of Year, 828  
   Measurements, 864  
   Olympic Games, 830-37  
   Organizations, 806  
   Review of 1954, 14  
   Sullivan Awards, 837  
   *See also* individual sports  
 Spring (1955), 544  
 Spring tides, 545  
 Springfield, Ill., 218, 537  
 Springfield, Mass., 218, 537, 547  
 Springfield, Mo., 218, 537  
 Springfield, Ohio, 218  
 Squalus (submarine), 740  
 Square: Area, 472  
 "Square deal," 352  
 Squares and square roots, 475  
 Squash racquets, 848, 906  
 Squash tennis, 849, 906  
 Stadiums: Baseball, 819  
 Stalin, Joseph, 406-08, 703, 704  
   Death, 408  
 Stalingrad, U.S.S.R., 415  
 Stamford, Conn., 218  
 Stamp Act, 747  
 Stamp taxes, 796  
 Stamps: First issued, 748  
 Standard time, 522  
 Stanley Cup, 852, 893  
 "Star-Spangled Banner," 372  
 Stars:  
   Brightest, 541  
   Morning & evening (1955), 538-41  
   "Twinkling": cause, 545  
   State, U. S. Dept. of, 331, 333  
   Secretaries, 335-38  
   States (U. S.), 159-79  
   Abbreviations, 212  
   Maps, 152 58  
   New: procedure, 365  
   Only one split, 168  
   Only one that may subdivide, 176  
   Population (1790-1950), 219-20  
   Thirteen original, 358  
   *See also* individual states  
 States' Rights Democratic party, 289

**Stations:** Radio & TV, 183-99, 248, 249  
**Statue of Liberty,** 357  
**Statute mile:** Defined, 470  
**Steam engine:** Invention, 479  
**Steamboat:** Invention, 479  
**Steamships:** Records, 743  
**Steel industry:**  
 Exports, 802  
 Hours worked, 798  
 Imports, 802  
 NATO vs. Soviet bloc, 418  
 Pittsburgh, 195  
 Production: U. S., 759, 786  
 Production: world, 779  
 Strike (1952), 403  
 Truman seizure, 403  
 United States, 758  
 Wage raise (1937), 401  
 Wages, 798  
**Stere:** Defined, 470  
**Stevenson, Adlai E.:**  
 Candidate for President, 290  
 Nomination, 280  
**Stimson Doctrine,** 404  
**Stock market,** 773-74  
 Crash (1929), 400  
 Federal Securities Act, 296  
 SEC, 297  
**Stockholm, Sweden,** 695, 729  
**Stockton, Calif.,** 218  
**Stone (meas.):** Defined, 474  
**Stone industry:**  
 Hours worked, 798  
 Production, 785  
 Wages, 798  
**Stores. See Retail**  
**Stoves:** Electric: sales, 785  
**Stratosphere:** First flight, 517  
**Strikes (labor):**  
 Causes, 800  
 First in U. S., 749  
 Number, 800  
 Sit-down strikes, 401, 402  
 Terminated in 1953, 800  
**Stromboli,** 722  
**Students. See Colleges; Schools**  
**Submarines:**  
 Atomic, 426  
 First use in warfare, 175  
 U. S., 308  
**Suburban Handicap,** 886  
**Subway:** First, 749  
**Succession:** Presidential, 280, 299, 369  
**Sudan, Anglo-Egyptian,** 617  
 Agriculture: rating, 778  
 Area & population, 561  
**Sudan, French,** 627  
 Area & population, 623  
**Suez Canal,** 617, 725  
**Sugar Act,** 348  
**Sugar Bowl (football),** 844  
**Sugar industry:**  
 Consumption, 783  
 Imports, 802  
 Prices: retail, 783  
 Production: world, 778  
 Rationing, 402  
**Suicides:** Death rates, 228  
**Sukthoth,** 497, 498  
**Sulfa drugs:** Discovery, 480  
**Sullivan Award,** 837  
**Sumatra,** 645-46  
 Area, 717  
 Volcanoes, 723  
**Summer (1955)** 544  
**Sun 541-42**  
 Eclipses (1955), 545  
 Rise & set (1955), 524-35  
 Sun-spots, 542, 543  
 Symbol, 542  
 Zodiac, 542  
**Sun Valley, Idaho,** 163

**Sunshine:** U. S.: cities, 213  
 Superior, Lake, 721  
 U. S.: water area, 208  
**Supersonic flight:** First, 517  
**Supremacy, Act of,** 495  
**Supreme Court (U. S.):**  
 Dred Scott case, 745  
 "Fair trade" laws, 403  
 First law found unconstitutional, 748  
 Judiciary Act, 298  
 Justices: list, 339  
 Powers, 364  
 Roosevelt plan, 398  
 Salaries, 329  
 Segregation: banned in schools, 10  
 Segregation: ruling on, 399  
 Sit-down strikes, 402  
 Social Security Act, 401  
 TVA, 401  
 Taft-Hartley Act, 403  
 Truman's steel seizure, 403  
 United Mine Workers, 402  
 Wagner-Connery Act, 401  
 Washington State Minimum Wage Act for Women, 401  
**Supreme Courts:** States, 201  
**Surgery:** First antiseptic, 480  
**Suribachi, Mt.,** 415  
**Surinam,** 674  
 Minerals: rating, 776  
**Surrenders. See World War II**  
 under individual countries  
**Surveying:**  
 Measures, 474  
 Surveyors: number, 232  
**Survivors' Insurance,** 92-93  
**Suspicion:** Arrests for, 243  
**Susquehanna River,** 212  
**Sutter's Mill,** 745  
**Swaziland,** 569  
 Area & population, 561  
**Sweden:**  
 General information, 695-96  
 Agriculture: rating, 777  
 Birth rate, 233  
 Currency: par value, 805  
 Death rate, 233  
 Diplomats: U. S., 342  
 ECA: allotments, 805  
 Emigration: to U. S., 226  
 Industry: production, 800  
 Industry: rating, 779  
 Life expectancy, 231  
 MSA: allotments, 805  
 Merchant fleet: rating, 779  
 Minerals: rating, 777  
 Telephones: rating, 779  
 Trade, 801, 803  
 United Nations, 377  
**Sweet potatoes:**  
 Consumption, 783  
 Prices, 786  
**Swimming,** 872-73  
 1954 champions, 901, 907  
 College, 900, 901  
 English Channel, 907  
 Olympic Games, 833-35  
 Pools: number, 793  
**Swine:** On farms, 787  
**Switzerland:**  
 General information, 696-98  
 Birth rate, 233  
 Diplomats: U. S., 342  
 Emigration: to U. S., 226  
 Labor: purchasing power, 782  
 Life expectancy, 231  
 Telephones: rating, 779  
 Trade, 801, 803  
**Sydney, Australia,** 591

**Synodic month,** 545  
**Syphilis:**  
 Death rates, 228  
 Wassermann test, 480  
**Syracuse, N. Y.:**  
 General information, 199  
 Climate, 213  
 Government, 200  
 Longitude & latitude, 537  
 Magnetic declination, 537  
 Newspaper: leading, 247  
 Population: growth, 218  
 Time of day, 537  
**Syria:**  
 General information, 698  
 Currency: par value, 805  
 Diplomats: U. S., 342  
 Trade: with U. S., 801  
 United Nations, 377

— T —

**Tabernacles, Feast of,** 497  
**Table tennis,** 904  
**Tacoma, Wash.,** 218  
**Taft, Robert A.:** Death, 399  
**Taft, William Howard:**  
 Biography, 324  
 Cabinet, 337  
 Election, 283, 291  
 Family, 330  
 Nominations, 280  
 Taft Museum, 186  
**Taft-Hartley Act,** 299, 774  
 Amendment, 301  
 Invoked against copper strike, 403  
**Tahiti,** 632-33  
**Taiwan. See Formosa**  
**Taj Mahal,** 733  
**Tampa, Fla.,** 163  
 Area, 218  
 Longitude & latitude, 537  
 Magnetic declination, 537  
 Newspaper: leading, 247  
 Population, 218  
 Time of day, 537  
**Tanganyika Territory,** 570  
 Area & population, 561  
 Volcano, 722  
**Tangier,** 670-71, 715  
**Tank, military:** Invention, 479  
**Tannenberg, Battle of,** 748  
**Taoists:** Number, 482  
**Taranto,** 413  
**Tariffs:**  
 Emergency Act, 295  
 Fordney-McCumber, 295  
 Hawley-Smoot, 296  
 Payne-Aldrich, 294  
 Tariff Commission, 333, 334  
 Tariff walls, 767  
 Trade Agreements Act, 297  
 Underwood-Simmons, 294  
**Tasmania,** 714, 717  
**Tate Gallery,** 730  
**Taxes:**  
 City tax rates, 183-99  
 Corporation taxes, 94  
 Estate taxes, 89  
 Excess-profits taxes, 302  
 Excise taxes, 302  
 Federal taxes, 302  
 Gasoline taxes, 244  
 Gift taxes, 89  
 Poll taxes, 293  
 Revenue from, 796  
 Sales tax: autos, 244  
 See also Income tax  
**Taxidermists:** Number, 793  
**Taylor, Zachary:**  
 Biography, 319

- Cabinet, 336
- Election, 282
- Family, 330
- Minority President, 376
- Teachers: Public schools, 251, 254
- Teheran Conference, 343, 415
- Telegraph industry:
  - Construction, 795
  - Hours worked, 799
  - Invention of telegraph, 480
  - Mann-Elkins Act, 294
  - Wages, 799
- Telephone industry:
  - Construction, 795
  - Hours worked, 799
  - ICC, 294
  - Wages, 799
- Telephones:
  - Countries: leading, 779
  - Families with: by state, 781
  - In use, 752
  - Invention, 480
- Telescopes:
  - Astronomical, 546
  - Invention, 480
- Television:
  - Advertising, 793
  - First commercial broadcast, 480
  - First flight on, 841
  - Invention, 480
  - Review of 1954, 18-19
  - Sets, 752
  - Sets: by city, 183-99
  - Stations, 248
  - Stations: by city, 183-99
  - Statistics: by year, 249
- Temperature, 213, 725
- Tenant farmers, 763
- Tennessee:
  - General information, 175-76
  - Abbreviation, 212
  - Agriculture: statistics, 787
  - Altitudes, 209
  - Births: number, 229
  - Cities & towns, 223
  - Congress: members, 29, 33
  - Congress: representation, 292
  - Deaths: motor-vehicle, 235
  - Deaths: number, 229
  - Divorces: statistics, 238-39
  - Economy: statistics, 781
  - Education: Negroes, 254
  - Education: statistics, 251, 252
  - Elections: statistics, 284-91
  - Evolution trial, 747
  - Executions: method, 242
  - Government, 201
  - Highest, lowest points, 209
  - Holidays, 499
  - Hospitals: number, 241
  - Marriages: statistics, 236
  - Motor vehicles: deaths, 235
  - Motor vehicles: laws, 244
  - Newspapers: number, 245
  - Places: by size, 223
  - Population: by sex, 222
  - Population: density, 218
  - Population: growth, 219-20
  - Population: marital status, 237
  - Population: racial, 221
  - Population: 21 yrs. & over, 222
  - Shore line, 214
  - Time zone, 151
  - Tornado (1953), 739
  - Unemployment: compensation, 95
  - Voting: qualifications, 293
  - War of Independence, 747
- Texas City, Tex., 739
- Textbooks: Free to pupils, 252
- Textile industry:
  - Consumption, 785
  - Exports, 802
  - Hours worked, 798
  - Imports, 802
  - Prices, 790
  - Production, 785
  - Wages, 798
- Thailand:
  - General information, 699-700
  - Agriculture: rating, 778
  - Birth rate, 779
  - Currency: par value, 805
  - Diplomats: U. S., 342
  - International Bank, 805
  - Minerals: rating, 777
  - United Nations, 377
- Thanksgiving Day, 497, 498, 499
- Tennessee Valley Authority, 175, 296, 333, 334
- Tennis, 826-29
  - 1954 champions, 899, 906
  - British champions, 829
  - College tennis, 899, 900
  - Court tennis, 849, 906
  - Davis Cup, 826
  - History, 826
  - Lawn tennis, 826-29
  - Measurements, 864
  - Professional tennis, 837
  - Squash tennis, 849, 906
  - Table tennis, 904
  - U. S. champions, 827
  - Wightman Cup, 826
- Terre Haute, Ind., 218
- Territorial expansion: U. S., 208
- Texas:
  - General information, 176
  - Abbreviation, 212
  - Agriculture: statistics, 787
  - Altitudes, 209
  - Births: number, 229
  - Cities & towns, 223
  - Coastline, 214
  - Congress: members, 29, 33
  - Congress: representation, 292
  - Deaths: motor-vehicle, 235
  - Deaths: number, 229
  - Divorces: statistics, 238-39
  - Economy: statistics, 781
  - Education: Negroes, 254
  - Education: statistics, 251, 252
  - Elections: statistics, 284-91
  - Executions: method, 242
  - Government, 201
  - Highest, lowest points, 209
  - Holidays, 499
  - Hospitals: number, 241
  - Hurricane (1900), 739
  - Map, 156
  - Marriages: statistics, 236
  - Motor vehicles: deaths, 235
  - Motor vehicles: laws, 244
  - Newspapers: number, 245
  - Places: by size, 223
  - Population: by sex, 222
  - Population: density, 218
  - Population: growth, 219-20
  - Population: marital status, 237
  - Population: racial, 221
  - Population: 21 yrs. & over, 222
  - Shore line, 214
  - Time zone, 151
  - Tornado (1953), 739
  - Unemployment: compensation, 95
  - Voting: qualifications, 293
  - War of Independence, 747
- Texas City, Tex., 739
- Textbooks: Free to pupils, 252
- Textile industry:
  - Consumption, 785
  - Exports, 802
  - Hours worked, 798
  - Imports, 802
  - Prices, 790
  - Production, 785
  - Wages, 798
- Thailand:
  - General information, 699-700
  - Agriculture: rating, 778
  - Birth rate, 779
  - Currency: par value, 805
  - Diplomats: U. S., 342
  - International Bank, 805
  - Minerals: rating, 777
  - United Nations, 377
- Thanksgiving Day, 497, 498, 499
- Thaw-White case, 747
- Theater:
  - Longest Broadway runs, 750
  - N. Y. Critics' awards, 513
  - Pulitzer Prizes, 509
  - Review of 1954, 19-20
  - Theaters: number, 793
- Theories: Scientific, 479-80
- Thermometer:
  - Invention, 480
  - Scales, 473
- Thermopylae, Battle of, 746
- Thiamine: In foods, 476
- Third International, 407, 746
- Thirteenth Amendment, 367
- Thirty Years' War, 747
- Thomas, Norman, 284-89
- Tiberias, Sea of, 654
- Tibet, 604-05
  - Discovery, 713
- Tidelands Oil Bill, 301, 302
- Tides, 545
  - Tidal shoreline: U. S., 214
  - Tidal waves, 738
- Tierra del Fuego, 551
- Tigris, 721
- Tilden, Samuel J., 282
- Time:
  - Cities: foreign, 536
  - Cities: U. S. & Canada, 537
  - Kinds, 522-23
  - Zones, 522-23
  - Zones: U. S., 151
- Timor, Portuguese, 689
  - Area & population, 687
- Tin: Production: world, 777
- Tinker Field, 195
- Tire: Pneumatic: invention, 480
- Titanic (ship): Sinking, 740
- Tito, Marshal, 711
  - Denounced by Cominform, 418
  - Leads left-wing guerrillas, 414
- Tobacco industry:
  - Consumer spending, 780
  - Establishments, 789
  - Exports, 802
  - Hours worked, 798
  - Income: marketing, 788
  - Prices: index, 790
  - Production: U. S., 785, 787
  - Sales, 790
  - Taxes, 796
  - Wages, 798
- Tobago. See Trinidad
- Tobruk, 413
- Togo (French), 629
  - Area & population, 623
- Togoland, 561, 571
- Toilets: In homes, 764
- Tojo, Hideki, 414, 416
- Tokyo, Japan, 657
  - Libraries, 729
  - Longitude & latitude, 536
  - Population: world rank, 737
  - Time of day, 536
  - World War II, 414, 416
- Toledo, Ohio, 173, 218, 247, 278
- Tomatoes: Prices, 783
- Tonga, 594
  - Area & population, 561
- Tongking, 631-32
- Topeka, Kans., 218
- Tornadoes: Famous, 739
- Toronto, Ont., 577
- Toscanini, Arturo: Retires, 10
- Toulon, France: Fleet scuttled, 415
- Tourist camps: Number, 793
- Tours, Battle of, 747
- Town: Oldest in U. S., 163
- See also Cities



Townsend pension plan, 402  
 Township (meas.): Defined, 474  
 Track and Field, 868-71  
   1954 champions & records, 903-4  
   A. A. U., 903  
   Boston Marathon, 870  
   College, 900, 903-4  
   Mile runs: fastest, 867, 871  
   Olympic Games, 830-33  
 Tractors:  
   Exports, 802  
   Invention, 480  
 Trade:  
   Agreements, 801  
   Agreements: legislation, 297-302  
   Countries: by year, 803  
   Countries: leading, 779  
   Employment, 798  
   FTC, 294  
   ITO, 380  
   Legislation, 294  
   U. S.: foreign, 767-68  
 Trade-marks: Procedure, 249  
 Trade unions. *See* Unions  
 Trafalgar, Battle of, 746  
 Trains. *See* Railroads  
 Transatlantic flights, 516, 517  
 Transbay Bridge, 735  
 Transformer: Invention, 480  
 Trans-Jordan. *See* Jordan  
 Transport planes, 520, 521  
 Transportation industry:  
   Consumer spending, 780, 783  
   Death rates, 234  
   Developments: U. S., 764-65  
   Employment, 798  
   Equipment: production, 785  
   Establishments, 784  
   Hours worked, 798, 799  
   Injuries, 800  
   Legislation, 295  
   Passenger traffic, 792  
   Wages, 798, 799  
   *See also* Railroads  
 Transvaal, 574  
 Trapezoid: Area, 472  
 Travel: Consumer spending, 780  
 Travers Stakes, 886  
 Treason: Defined, 364  
 Treasury, U. S. Dept. of, 331, 334  
   Cash: income & outgo, 796  
   Education: funds, 257  
   Secretaries, 335-38  
 Treaties:  
   Hay-Bunau-Varilla, 294  
   Hay-Pauncefote, 294  
   Japanese, 347  
   North Atlantic: text, 345-46  
   U. S., Australia, N. Z., 346-47  
   U. S. Philippines, 347  
   Versailles, 295  
   Washington Conference, 295  
   *See also* World War II  
 Trent, Council of, 745  
 Trenton, N. J., 218  
 Triangle: Area, 472  
 Trieste, 700, 715  
   ECA & MSA allotments, 805  
   Map, 417  
   Settlement (1954), 23  
 Trinidad, Colo., 537  
 Trinidad & Tobago, 582-83  
   Area & population, 561  
 Trinity Sunday, 498  
 Triode: Invention, 479  
 Tripartite Security Treaty, 346-47  
 Triplets: Number born, 221  
 Tripolitania, 665  
 Trojan War, 747

Tropic of Cancer, 543  
 Tropic of Capricorn, 543  
 Tropical year, 545  
 Trotsky, Leon, 396, 406  
 Trotting. *See* Harness racing  
 Troy: Destroyed, 747  
 Troy, N. Y., 218  
 Troy weight, 471  
 Trucial Coast, 549-50  
 Trucks: Freight, 792  
 Trujillo, Rafael J., 613  
 Truman, Harry S.:  
   Biography, 326  
   Assassination attempt, 342  
   Cabinet, 338  
   Calls 80th Congress "worst," 399  
   Election, 289  
   Family, 330  
   Meets MacArthur on Wake, 420  
   Minority President, 370  
   Nomination, 280  
   Removes MacArthur, 420  
   Steel industry seizure, 403  
   Truman Doctrine, 417  
   Won't run again, 399  
 Trusteeships: U. N., 183  
   *See also* United Nations  
 Tsars: Russia, 122  
 Tuamotu Archipelago, 632-33  
 Tube, radio: Invention, 479  
 Tuberculosis:  
   Bacillus: discovery, 480  
   Death rates, 228  
   Hospitals, 241  
 Tucson, Ariz., 159  
 Tulsa, Okla., 173  
   Area, 218  
   Government, 200  
   Newspapers: leading, 247  
   Population, 218  
 Tun (meas.): Defined, 474  
 Tungsten filament: Invention, 479  
 Tunis, Tunisia, 415, 629  
 Tunisia, 629-30  
   Area & population, 623  
 Tupelo, Miss., 739  
 Turbojet: First flight, 517  
 Turkey:  
   General information, 700-02  
   Agriculture: rating, 777-78  
   Aid bill: U. S., 299, 300  
   Armed Forces: rating, 780  
   Currency: par value, 805  
   Diplomats: U. S., 342  
   ECA: allotments, 805  
   Earthquakes, 738  
   Emigration: to U. S., 226  
   Flood (1948), 738  
   International Bank, 805  
   MSA: allotments, 805  
   Minerals: rating, 776  
   Trade, 801, 803  
   Trade: rating, 779  
   United Nations, 377  
 Turkeys: On farms, 787  
 Turntables: Phonograph, 250  
 Tuscaloosa, Ala., 159, 276  
 Tutankhamen: Tomb, 748  
 Tuvalu, 181  
 Tweed Ring, 748  
 Twelfth Amendment, 367  
 Twelfth Night, 496  
 Twentieth Amendment, 368-69  
 Twentieth Century Fund, 750  
 Twenty-first Amendment, 369  
 Twenty-second Amendment, 369  
 Twilight: Cause, 545  
 "Twin Cities," 192  
 Twin Falls, Idaho, 163  
 Twins: Number born, 221  
 Tydings-McDuffie Act, 296

Tyler, John:  
   Biography, 319  
   Cabinet, 336  
   Family, 330  
 Typewriter: Invention, 480  
 Typhoid: Death rates, 228  
 Typhoons: Famous, 739

— U —

Ubangi-Shari, 627  
   Area & population, 623  
 Uganda, 570  
   Area & population, 561  
 Ukrainian S.S.R., 377  
   *See also* Union of S.S.R.  
 Ulster, 517  
 Underwood-Simmons Tariff, 294  
 Unemployment:  
   By year, 756  
   Insurance, 94-95  
   Insurance: collections, 796  
 Union City, N. J., 218  
 Union Labor party, 282  
 Union of South Africa. *See* South Africa  
 Union of Soviet Socialist Republics:  
   General information, 702-07  
   Agriculture: rating, 777, 778  
   Airlines: rating, 779  
   Armed forces (1914-53), 412  
   Armed forces: rating, 780  
   Atomic bomb, 426  
   Bases, 136-37  
   Birth rate, 179  
   Britain: pact (1941), 414  
   Chronology (1917-53), 406-08  
   Cold war, 416-19  
   Diplomat: U. S., 342  
   Emigration: to U. S., 226  
   Five-year plans, 407  
   Germany: nonaggression pact, 407  
   Hydrogen bomb, 426  
   Industry: rating, 779  
   Labor: purchasing power, 782  
   Lakes, 721  
   League of Nations, 422  
   Libraries, 729  
   Life expectancy, 231  
   Merchant fleet: rating, 779  
   Minerals: rating, 776, 777  
   Pact with Japan (1941), 414  
   Recognized by Britain, etc., 406  
   Recognized by U. S., 404  
   Rulers of Russia, 122  
   Soviet bloc: strength, 418  
   United Nations, 377, 423  
   Universities, 728  
   World War II, 309, 413-16  
 Union party, 282, 286  
 Unions: Leading, 775  
   *See also* Labor  
 Unitarians, 486  
 United Automobile Workers, 775  
   Secedes from CIO, 402  
   Signs with General Motors, 403  
 United Mine Workers, 775  
   Fined, 402  
   Rejoins AFL, 402  
   Withdraws from AFL, 402  
 United Nations, 376-94  
   Actions and major cases, 376-77  
   Agencies, 379-80  
   Aggression: action against, 386-87

- Atomic energy control, 376  
 Charter: text, 382-94  
 Charter: U. S. ratification, 298  
 Children's Fund, 299  
 Chronology, 422-23  
 Delegation heads, 378  
 Disputes: settlement, 386  
 Economic and Social Council, 378, 379, 389-90  
 Events (1954), 27  
 General Assembly, 383-84  
 Greece, 376  
 Headquarters, 194  
 India, 376-77  
 Indonesia, 376  
 International Court, 380, 391-92  
 Iran, 376  
 Israel, 376  
 Italian colonies, 376  
 Kashmir, 376-77  
 Korea, 377, 421  
 Major cases and actions 376-77  
 Members, 377  
 Membership, 377  
 Membership procedure, 382-83  
 Netherlands, 376  
 Organization: chart, 381  
 Pakistan, 376-77  
 Palestine, 376  
 Principles, 382  
 Purposes, 382  
 Secretariat, 392  
 Security Council, 378, 379, 385-86  
 Territories: non-self-governing, 390  
 Trusteeship Council, 378, 379, 392  
 Trusteeships: system, 390-92  
 Trusteeships: U. S., 183  
 U.S.S.R., 377
- United States:**  
 Agencies: independent, 332-34  
 Agriculture: rating, 777, 778  
 Airlines, 519  
 Airlines: rating, 779  
 Area (1790-1950), 208  
 Armed forces: rating, 780  
 Aviation, 515-21  
 Bills & treaties, 294-302  
 Birth rate, 779  
 Cabinet members (1789-1954), 335-38  
 Cities, 183-200, 215, 218  
 Congress: members, 29-33  
 Constitution, 358-69  
 Continental Congresses, 371  
 Death rate, 780  
 Debt, 795  
 Declaration of Independence, 355-57  
 Diplomats: to & from, 341-42  
 Economics, 751-805  
 Education, 251-71  
 Elections: Presidential, 281-91  
 Employment, 798  
 Employment: rating, 779  
 Executions: Federal, 242  
 Executive Departments, 331-34  
 Flag, 373-75  
 Foreign affairs (1918-49), 403-06  
 Forest resources, 209  
 Geography, 208-14  
 Geography: map, 151  
 History, 348-54  
 Immigration, 226-28  
 Impeachments, 339, 360, 364  
 Industry: rating, 779  
 Maps, 151-58  
 Merchant fleet: rating, 779  
 Minerals: rating, 776, 777  
 National Park System, 271-73  
 Population (1790-1950), 208  
 Population (est. 1950-54), 214  
 Population: with territories, 228  
 Postal regulations, 311-14  
 Presidents, 315-30  
 Religious groups, 482-86  
 Social Security, 93-95  
 States, 159-79  
 Supreme Court Justices, 339  
 Telephones: rating, 779  
 Territories & possessions, 179-83  
 Time zones: map, 151  
 Trade: foreign, 801, 802  
 Trustships, 183  
 United Nations, 377  
 World War I, 352  
 World War II, 413-16  
 For further details, see individual entries
- United States (ship), 743**  
**United States Bank, 349, 350**  
**United States Chamber of Commerce, 776**  
**United States National Museum, 275**  
**United States of Indonesia. See Indonesia**  
**United Steel Workers, 775**  
 Strike (1952), 403  
**Universal Postal Union, 380**  
**Universalist Church, 486**  
**Universities. See Colleges**  
**University City, Mo., 169**  
**Unleavened Bread, Feast of, 496**  
**Uranium: Deposits, 777**  
**Uranus (planet), 541, 544**  
 Symbol, 542  
**Urban population, 222**  
**Urban territory: U. S., 223**  
**Uruguay:**  
 General information, 707-08  
 Agriculture: rating, 778  
 Currency: par value, 805  
 Diplomat: U. S., 342  
 Holiday: national, 736  
 International Bank, 805  
 Trade, 801, 803  
 United Nations, 377
- Utah:**  
 General information, 176-77  
 Agriculture: statistics, 787  
 Altitudes, 209  
 Births: number, 229  
 Cities & towns, 223  
 Congress: members, 29, 33  
 Congress: representation, 292  
 Deaths: motor vehicle, 235  
 Deaths: number, 229  
 Divorces: statistics, 238-39  
 Economy: statistics, 781  
 Education: statistics, 251, 252  
 Elections: statistics, 284-91  
 Executions: method, 242  
 Government, 201  
 Holidays, 499  
 Hospitals: number, 241  
 Map, 158  
 Marriages: statistics, 236  
 Motor vehicles: law, 244  
 Newspapers: number, 245  
 Population: by sex, 222
- Population: density, 218**  
**Population: growth, 219-20**  
**Population: marital status, 237**  
**Population: racial, 221**  
**Population: 21 yrs. & over, 222**  
 Time zone, 151  
 Unemployment: compensation, 95  
 Voting: Qualifications, 293  
 Utica, N. Y., 218  
 Utrecht, Netherlands, 672
- V —
- "V for Victory," 414**  
**V-J Day, 416**  
**Vaccination: Discovery, 480**  
**Vacuum cleaners: Sales, 785**  
**Vagrancy: Arrests, 243**  
**Valences (chem.), 477-78**  
**Valentine's Day, 496**  
**Valley Forge, 174**  
**Valley of Ten Thousand Smokes, 723**  
**Van Buren, Martin:**  
 Biography, 318  
 Cabinet, 335  
 Election, 281  
 Family, 330  
 Vancouver, Canada, 577  
 Vanderpool Gallery, 275  
 Vargas, Getulio: Suicide, 12  
 Variety stores, 791  
 Varnish. See Paint  
**Vatican City State:**  
 General information, 708-09  
 Library, 729  
 St. Peter's, 733  
 See also Roman Catholic Church  
**Vaudeville theater: First, 749**  
**Veal: Prices: farm, 786**  
**Vegetables:**  
 Consumption, 783  
 Exports & imports, 802  
 Income: marketing, 788  
 Prices: farm, 786  
 Prices: retail, 783
- Venezuela:**  
 General information, 709-10  
 Birth rate, 233  
 Currency: par value, 805  
 Death rate, 233  
 Diplomat: U. S., 342  
 Holiday: national, 736  
 Minerals: rating, 777  
 Trade, 801, 803  
 United Nations, 377
- Venice, Italy, 732**  
**Venus (planet), 538, 544**  
 Symbol, 542  
**Verdun, Battle of, 748**  
**Vermilion Range, 168**  
**Vermont:**  
 General information, 177  
 Abbreviation, 212  
 Agriculture: statistics, 787  
 Altitudes, 209  
 Births: number, 229  
 Cities & towns, 223  
 Congress: members, 30, 33  
 Congress: representation, 292  
 Deaths: motor-vehicle, 235  
 Deaths: number, 229  
 Divorces: statistics, 238-39  
 Economy: statistics, 781  
 Education: statistics, 251, 252  
 Elections: statistics, 284-91

## Vermont—(cont.)

Executions: method, 242  
 Government, 201  
 Highest, lowest points, 209  
 Holidays, 499  
 Hospitals: number, 241  
 Map, 152  
 Marriages: statistics, 236  
 Motor vehicles: deaths, 235  
 Motor vehicles: law, 244  
 Newspapers: number, 245  
 Places: by size, 223  
 Population: by sex, 222  
 Population: density, 218  
 Population: growth, 219-20  
 Population: marital status, 237  
 Population: racial, 221  
 Population: 21 yrs. & over, 222  
 Time zone, 151  
 Unemployment: Compensation, 95  
 Voting: qualifications, 293  
 Versailles, Treaty of, 295  
 Hitler scraps, 410, 411  
 Senate rejects, 295, 404  
 Vesuvius, Mt., 722  
 Veterans:  
   Benefits, 310  
   Bonus bills, 295, 297  
   Education, 257, 310  
   GI Bill of Rights, 301, 310  
 Veterans' Administration, 333, 334  
   Education, 257  
 Veterans' Day, 497, 499  
 Veterinarians: Number, 232  
 Veto power: Presidential, 361  
 Vice Presidents (U. S.):  
   Election: procedure, 279, 367  
   List of, 328  
   Salary, 299, 329  
   Term: end of, 369  
 Vichy government, 413  
 Vicksburg, Battle of, 744  
 Vicksburg, Miss., 213  
 Victoria, B. C., 537, 717  
 Victoria (isl.): Area, 717  
 Victoria, Lake, 721  
 Victoria and Albert Museum, 730  
 Victoria Falls, 713  
 Victorian era, 562  
 Vienna, Austria:  
   Congress of Vienna, 745  
   Library, 729  
   Longitude and latitude, 536  
   Population, 737  
   Ring Theater fire, 739  
   Time of day, 536  
   World War II, 416  
 Viet-Nam, 631-32  
   Area & population, 623  
 Vieux Carre, 193  
 Villa, Pancho, 329  
 Virgin Islands (British), 582  
 Virgin Islands (U. S.):  
   General information, 182  
   Education: funds, 257  
   Executions: method, 242  
   National Convention delegates, 279  
 Virginia:  
   General information, 177  
   Abbreviation, 212  
   Agriculture: statistics, 787  
   Altitudes, 209  
   Births: number, 229  
   Cities & towns, 223  
   Congress: members, 30, 33  
   Congress: representation, 292  
   Constitution: ratified, 358  
   Deaths: motor-vehicle, 235

Deaths: number, 229  
 Divorces: statistics, 238-39  
 Economy: statistics, 781  
 Education: Negroes, 254  
 Education: statistics, 251, 252  
 Elections: statistics, 284-91  
 Government, 201  
 Highest, lowest points, 209  
 Holidays, 499  
 Hospitals: number, 241  
 Map, 152  
 Marriages: statistics, 236  
 Motor vehicles: deaths, 235  
 Motor vehicles: law, 244  
 Museum of Fine Arts, 278  
 Newspapers: number, 245  
 Places: by size, 223  
 Population: by sex, 222  
 Population: density, 218  
 Population: growth, 219-20  
 Population: marital status, 237  
 Population: racial, 221  
 Population: 21 yrs. & over, 222  
 Shore line, 214  
 Time zone, 151  
 Unemployment: compensation, 95  
   Voting: qualifications, 293  
   "Virginia Dynasty," 349  
 Virus: Crystallized: discovery, 480  
 Vitamins:  
   Discoveries, 480  
   Of foods, 476  
 Vocational schools, 252  
 Vogeler, Robert A., Jr., 399, 418  
 Volcano Islands, 183  
 Volcanoes, 722-23  
   Eruptions, 738  
 Volga, 720  
 Volstead Act, 295  
 Volume:  
   Formulas for, 472  
   Measures, 470  
 Voting:  
   Qualifications: by state, 293  
   Rights of citizens, 368, 369  
   Woman suffrage, 748  
   See also Elections  
 Vulcan Park, 184  
 Vulcanizing: Invention, 479

# --- W ---

Wabash River, 212  
 Waco, Tex., 218  
 Wadsworth Athenaeum, 278  
 Wages:  
   By year, 782  
   Frozen (1942), 402  
   Frozen (1951), 403  
   Industry, 798, 799  
   Legislation, 298, 300  
   Manufacturing, 798  
   Minimum (1933), 298  
   Minimum (1949), 300  
   State employees, 795  
 Wagner-Connery Act, 297  
 Waiters and Waitresses, 233  
 Wake Island, 182  
   World War II, 414  
 Waldorf-Astoria, 742  
 Wales:  
   Area and population, 562  
   Emigration: to U. S., 226  
   See also Great Britain  
 Walker Cup, 825  
 Wall: China, 745  
 Wall Street, 194

Wallace, Henry A., 280, 287, 289, 398  
 Wallace Collection, 730  
 Wallis Archipelago, 633  
 Walters Gallery, 278  
 War, U. S. Dept. of, 335-38  
 War criminals, 416  
 War debts: Moratorium, 296, 404  
 War Food Administration, 402  
 War Labor Board, 402  
 War Labor Disputes Act, 402  
 War of 1812, 748  
   Casualties, 308  
 War Production Board, 402  
 Warm Springs, Ga., 163  
 Wars:  
   Casualties, 308-10  
   Outlawed, 296, 404  
   See also individual wars  
 Wars of the Roses, 748  
 Warsaw, Poland, 683  
   World War II, 413, 415  
 Warships: By country, 780  
 Warwick, R. I., 174  
 Washing machines, 785  
 Washington, George:  
   Biography, 315  
   Birthday (holiday), 496, 499  
   Cabinet, 335  
   Elections, 281  
   Family, 330  
   Hall of Fame, 514  
   Mt. Rushmore carving, 175  
 Washington, D. C. See District of Columbia  
 Washington (state):  
   General information, 178  
   Abbreviation, 212  
   Agriculture: statistics, 787  
   Altitudes, 209  
   Births: number, 229  
   Cities & towns, 223  
   Congress: members, 30, 33  
   Congress: representation, 292  
   Deaths: motor-vehicle, 235  
   Deaths: number, 229  
   Divorces: statistics, 238-39  
   Economy: statistics, 781  
   Education: statistics, 251, 252  
   Elections: statistics, 284-91  
   Executions: method, 242  
   Government, 201  
   Highest, lowest points, 209  
   Holidays, 499  
   Hospitals: number, 241  
   Map, 157  
   Marriages: statistics, 236  
   Motor vehicles: deaths, 235  
   Motor vehicles: law, 244  
   Mountain peaks, 210  
   Newspapers: number, 245  
   Places: by size, 223  
   Population: by sex, 222  
   Population: density, 218  
   Population: growth, 219-20  
   Population: marital status, 237  
   Population: 21 yrs. & over, 222  
   Shore line, 214  
   Time zone, 151  
   Unemployment: compensation, 95  
   Voting: qualifications, 293  
 Washington Conference (1945), 417  
 Washington Monument, 162  
 Washington Naval Conference (1922), 295  
 Washington Park Futurity, 887  
 Wassermann test, 480



- Water:**  
 Boiling, freezing points, 473  
 Displacement, 480  
 First synthesis, 480  
 Water area: U. S., 208  
 Water polo, 834  
 Water power:  
   Federal commission, 295  
   TVA, 296  
**Water skiing, 911**  
**Waterbury, Conn., 218**  
**Waterfalls: Famous, 718**  
**Waterloo, Battle of, 746**  
**Waterloo, Iowa, 218**  
**Watertown, N. Y., 537**  
**Watertown, S. Dak., 175**  
**Waterways: Traffic, 792**  
**Watkins committee, 13**  
**Weather. See Climate**  
**Webster, Daniel, 281**  
**Weeks, Feast of, 497**  
**Weight lifting, 904**  
**Weights:**  
   Chemical elements, 477-78  
   Defined, 470-75  
**Weimar Constitution, 408, 410**  
**Welding shops: Number, 793**  
**Welland Canal, 725**  
**Welles, Orson: "Attack from Mars," 398**  
**West Germany. See German Federal Republic**  
**West Indies:**  
   Discovery, 713  
   Emigration: to U. S., 226  
   Map, 150  
**West North Central States:**  
   Economy: statistics, 781  
   Population: 21 yrs. & over, 222  
**West Point, N. Y., 303**  
**West South Central States:**  
   Economy: statistics, 781  
   Population: 21 yrs. & over, 222  
**West Virginia:**  
   General information, 178  
   Abbreviation, 212  
   Agriculture: statistics, 787  
   Altitudes, 209  
   Births: number, 229  
   Cities & towns, 223  
   Congress: members, 30, 33  
   Congress: representation, 292  
   Deaths: motor vehicle, 235  
   Deaths: number, 229  
   Divorces: statistics, 238-39  
   Economy: statistics, 781  
   Education: Negroes, 254  
   Education: statistics, 251, 252  
   Elections: statistics, 284-91  
   Executions: method, 242  
   Government, 201  
   Highest, lowest points, 209  
   Holidays, 499  
   Hospitals: number, 241  
   Map, 156  
   Marriages: statistics, 236  
   Motor vehicles: deaths, 235  
   Newspapers: number, 245  
   Places: by size, 223  
   Population: by sex, 222  
   Population: density, 218  
   Population: growth, 219-20  
   Population: marital status, 237  
   Population: racial, 221  
   Population: 21 yrs. & over, 222  
   Time zone, 151  
   Unemployment: compensation, 95  
   Voting: qualifications, 293  
   Western European Union, 26  
   Westminster Abbey, 414  
   Westphalia, Peace of, 747  
**Wheat:**  
   Flour: consumption, 783  
   Flour: prices, 783  
   Prices: farm, 786  
   Production: U. S., 787  
   Production: world, 778  
**Wheeler-Rayburn Act, 297**  
**Wheeling, W. Va., 218**  
**Whig party (U. S.), 281-82**  
**Whisky Insurrection, 748**  
**White House, 340**  
**White House Office, 331, 333**  
**White slave traffic, 242**  
**White Sulphur Spgs., W. Va., 178**  
**White-Thaw case, 747**  
**Whitney, Mt., 210, 716**  
**Whitney Museum, 274**  
**Whitsunday, 497**  
**Who Was Who, 457-69**  
**Wholesale trade:**  
   Development: U. S., 765-67  
   Employment, 798  
   Establishments, 784, 789  
   Hours worked, 799  
   Injuries, 800  
   Prices, 790  
   Sales, 790  
   Wages, 799  
**Whooping cough: Death rates, 228**  
**Who's Who, 429-56**  
**Wichita, Kans., 165**  
   Area, 218  
   Climate, 213  
   Government, 200  
   Longitude & latitude, 537  
   Magnetic declination, 537  
   Newspapers: leading, 247  
   Population, 218  
   Time of day, 537  
**Wichita Falls, Tex., 218**  
**Widener Handicap, 887**  
**Widows & Widowers: Number, 237**  
**Wightman Cup, 826**  
**Wilderness, Battle of, 744**  
**Wilkes-Barre, Pa., 218**  
**Willkie, Wendell, 280, 287**  
**Wilmington, Del., 213, 218**  
**Wilmington, N. C., 537**  
**Wilson, Woodrow:**  
   Biography, 324-25  
   Cabinet, 337  
   Elections, 283, 291  
   Family, 330  
   14-point address, 404  
   Hall of Fame, 514  
   Minority President, 370  
   Nominations, 280  
**Wilson, Mt.: Observatory, 546**  
**Wilson Cloud Chamber, 480**  
**Wind Cave National Park, 272, 724**  
**Winds (myth.), 117**  
**Windsor, Duke of. See Edward VIII**  
**Windward Islands, 583**  
   Area & population, 561  
**Wine: Measures, 474**  
**Winnipeg, Manitoba, 537, 577**  
**Winston-Salem, N. C.:**  
   Area, 218  
   Government, 200  
   Newspaper: leading, 247  
   Population, 218  
**Winter (1955), 544**  
**Wire: Measurement, 474**  
**Wireless: Invention, 479**
- Wisconsin:**  
   General information, 178-79  
   Abbreviation, 212  
   Agriculture: statistics, 787  
   Altitudes, 209  
   Births: number, 229  
   Cities & towns, 223  
   Congress: members, 30, 33  
   Congress: representation, 292  
   Deaths: motor-vehicle, 235  
   Deaths: number, 229  
   Divorces: statistics, 238-39  
   Economy: statistics, 781  
   Education: statistics, 251, 252  
   Elections: statistics, 284-91  
   Government, 201  
   Highest, lowest points, 209  
   Holidays, 499  
   Hospitals: number, 241  
   Map, 156  
   Marriages: statistics, 236  
   Motor vehicles: deaths, 235  
   Motor vehicles: laws, 244  
   Newspapers: number, 245  
   Places: by size, 223  
   Population: by sex, 222  
   Population: density, 218  
   Population: growth, 219-20  
   Population: marital status, 237  
   Population: racial, 221  
   Population: 21 yrs. & over, 222  
   Time zone, 151  
   Unemployment: compensation, 95  
   Voting: qualifications, 293  
   Witch trials (Salem), 748  
**Wives: Of Presidents, 330**  
**Women:**  
   Armed forces: U. S., 309  
   Arrests: number, 243  
   Births: females, 224  
   College graduates, 254  
   Death rate: by age & year, 232  
   Deaths, 224  
   First airline pilot, 517  
   First licensed pilot, 516  
   First to fly, 515  
   First transatlantic solo, 517  
   First U. S. air pilot, 516  
   Firsts, 749  
   Life expectancy, 230-31  
   Marital status, 237  
   Marriage prospects, 240  
   Population: by color, age, 224  
   Population: by state, 222  
   Voting rights, 368  
   Woman suffrage, 748  
   Workers, 799, 801  
**Wonders: Seven of world, 714**  
**Wood Memorial, 887**  
**Wood pulp: imports, 802**  
**Wool:**  
   Consumption, 785  
   Imports, 802  
   Prices: farm, 786  
   Production: world, 778  
**Woolworth Building, 742**  
**Woonsocket, R. I., 218**  
**Worcester, Mass., 218, 247, 278**  
**Words:**  
   Crossword puzzle guide, 96-124  
   New words & meanings, 34-36  
   Troublesome pronunciations, 46-57  
   Words frequently confused, 57

**Words—(cont.)**

Words frequently misspelled, 58-61

Work. *See* Labor

Workers party, 284

**World:**

Air mileages, 206-07  
Canal: busiest, 168  
Cities: largest, 737  
Climate: extremes, 725-26  
Dimensions, 715  
Elevations, 715  
Highest auto road, 161  
Highest capital city, 557  
Highest country, 605  
Highest suspension bridge, 161

Land areas, 715  
Population, 715  
Population densities: high, 715

Radio sets: number, 250  
Religions, 482

Round-the-world flights, 516, 517  
Seven wonders, 714

World Calendar, 538  
World Court, 295, 297, 422

World Health Organization, 380  
World Meteorological Organization, 380

World Series, 808-14  
1954 statistics, 915-16

**World War I:**

Business activity, 401  
Casualties, 308, 310  
Consumer prices, 757  
Debts: moratorium, 296  
Declaration: U. S., 294  
Events, 748  
Nations in combat, 428  
Versailles Treaty, 295

**World War II:**

Business activity, 401  
Casualties, 308, 309  
Chronology, 413-16  
Consumer prices, 757  
Lend-Lease Act, 298  
Nations in combat, 428  
Treaties: Japanese, 658-59  
Treaty: Bulgarian, 597  
Treaty: Finnish, 620  
Treaty: Hungarian, 643  
Treaty: Italian, 655  
Treaty: Rumanian, 690  
*See also* Conferences; individual countries

Wounded: In wars, 308-10

Wrestling, 836, 897, 900

**Wyandotte Cave, 724****Wyoming:**

General information, 179  
Abbreviation, 212  
Agriculture: statistics, 787  
Altitudes, 209  
Births: number, 229  
Cities & towns, 223  
Congress: members, 30, 33  
Congress: representation, 292  
Deaths: motor-vehicle, 235  
Deaths: number, 229  
Divorces: statistics, 238-39  
Economy: statistics, 781  
Education: statistics, 251, 252  
Executions: method, 242  
Government, 201  
Highest, lowest points, 209  
Holidays, 499  
Hospitals: number, 241  
Map, 157  
Marriages: statistics, 236  
Motor vehicles: deaths, 235  
Motor vehicles: laws, 244  
Newspapers: number, 245  
Places: by size, 223  
Population: by sex, 222  
Population: density, 218  
Population: growth, 219-20  
Population: marital status, 237  
Population: racial, 221  
Population: 21 yrs. & over, 222  
Time zone, 151  
Unemployment: compensation, 95  
Voting: qualifications, 293  
Woman suffrage, 748

**— X —**

X-rays: Discovery, 480

**— Y —**

YMCA, 750, 856

YWCA, 750

Yachting, 863, 917

Yakima, Wash., 178, 537

Yalta Conference, 343-44, 415

Yalu River, 410

Yangtze Kiang, 720

Yard (meas.): Defined, 470

Year: Sidereal & tropical, 545

Yellow-dog contracts, 296

Yellowstone National Park, 272

Geyzers, 724-25

Waterfalls, 718

Yellowstone River, 212

Yemen, 710

Area & population, 549

United Nations, 377

Yerkes Observatory, 546

Yom Kippur, 497, 498

Yonkers, N. Y., 218

York, Maine, 166

York, Pa., 218

Yorktown, Battle of, 744

Yosemite National Park, 272

Young Men's Christian Association, 750, 856

Young Plan, 410

Young Women's Christian Association, 750

Youngstown, Ohio, 218

**Yugoslavia:**

General information, 711-712

Armed forces: rating, 780

Birth rate, 779

Currency: par value, 805

Diplomat: U. S., 342

Emigration: to U. S., 226

Industry: rating, 779

International Bank, 805

MSA: allotments, 805

Minerals: rating, 776, 777

Trade, 803

United Nations, 377

United States loan, 418

World War II, 309, 413, 414

Yukon Territory, 580

Yuma, Ariz., 159

**— Z —**

Zanzibar, 576

Area & population, 561

Zealand, 612

Zenger case, 745

**Zeppelin:**

First, 515

Invention, 480

Zero: Absolute, 473

Zeus: Statue at Olympia, 714

Zinc: Production, 777, 786

Zion National Park, 272

Zodiac: Signs, 542

Zoological gardens, 731-32

First, 749

Zoroastrians: Number, 482

Zurich, Switzerland, 696

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